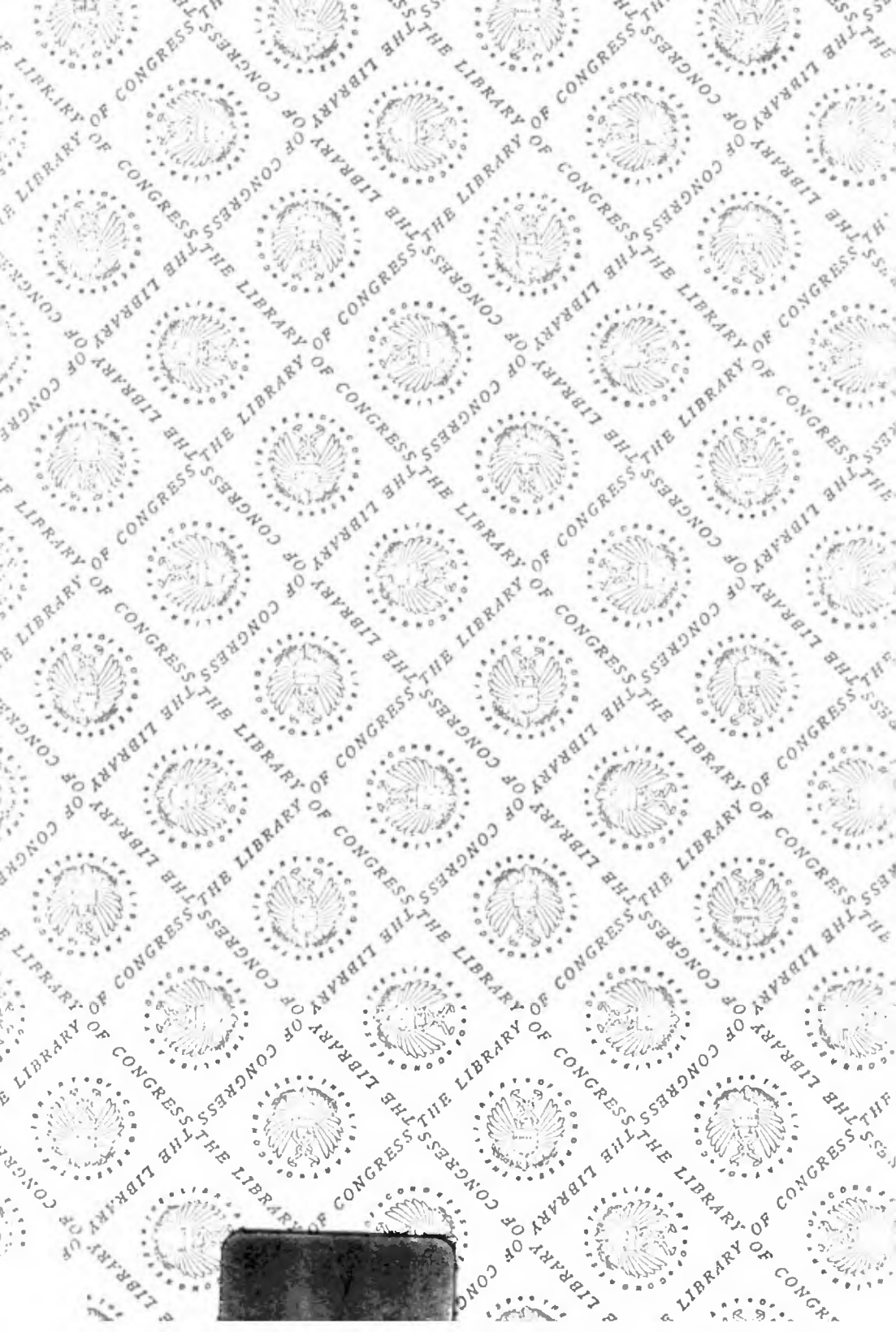


AUTHORIZATION FOR THE HAZARDOUS MATERIALS ACT FOR FISCAL YEAR 1980

HEARING

BEFORE THE

SUBCOMMITTEE ON TRANSPORTATION AND COMMERCE

OF THE

COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE

HOUSE OF REPRESENTATIVES

NINETY-SIXTH CONGRESS

FIRST SESSION

ON

H.R. 3502

A BILL TO AMEND THE HAZARDOUS MATERIALS TRANSPORTATION ACT TO AUTHORIZE APPROPRIATIONS FOR FISCAL YEARS 1980 AND 1981

APRIL 10, 1979

Serial 96–33

Printed for the use of the
Committee on Interstate and Foreign Commerce

U.S. GOVERNMENT PRINTING OFFICE

48-879 O WASHINGTON : 1979

COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE

HARLEY O. STAGGERS, West Virginia, *Chairman*

JOHN D. DINGELL, Michigan
LIONEL VAN DEERLIN, California
JOHN M. MURPHY, New York
DAVID E. SATTERFIELD III, Virginia
BOB ECKHARDT, Texas
RICHARDSON PREYER, North Carolina
JAMES H. SCHEUER, New York
RICHARD L. OTTINGER, New York
HENRY A. WAXMAN, California
TIMOTHY E. WIRTH, Colorado
PHILIP R. SHARP, Indiana
JAMES J. FLORIO, New Jersey
ANTHONY TOBY MOFFETT, Connecticut
JIM SANTINI, Nevada
ANDREW MAGUIRE, New Jersey
MARTY RUSSO, Illinois
EDWARD J. MARKEY, Massachusetts
THOMAS A. LUKEN, Ohio
DOUG WALGREN, Pennsylvania
ALBERT GORE, JR., Tennessee
BARBARA A. MIKULSKI, Maryland
RONALD M. MOTTL, Ohio
PHIL GRAMM, Texas
AL SWIFT, Washington
MICKEY LELAND, Texas
RICHARD C. SHELBY, Alabama
SAMUEL L. DEVINE, Ohio
JAMES T. BROYHILL, North Carolina
TIM LEE CARTER, Kentucky
CLARENCE J. BROWN, Ohio
JAMES M. COLLINS, Texas
NORMAN F. LENT, New York
EDWARD R. MADIGAN, Illinois
CARLOS J. MOORHEAD, California
MATTHEW J. RINALDO, New Jersey
DAVE STOCKMAN, Michigan
MARC L. MARKS, Pennsylvania
TOM CORCORAN, Illinois
GARY A. LEE, New York
TOM LOEFFLER, Texas
WILLIAM E. DANNEMEYER, California

W. E. WILLIAMSON, *Chief Clerk and Staff Director*
KENNETH J. PAINTER, *First Assistant Clerk*
THOMAS M. RYAN, *Professional Staff*
J. PAUL MOLLOY, *Minority Professional Staff*

SUBCOMMITTEE ON TRANSPORTATION AND COMMERCE

JAMES J. FLORIO, New Jersey, *Chairman*

JIM SANTINI, Nevada
BARBARA A. MIKULSKI, Maryland
JOHN M. MURPHY, New York
MARTY RUSSO, Illinois
HARLEY O. STAGGERS, West Virginia
(Ex officio)
EDWARD R. MADIGAN, Illinois
GARY A. LEE, New York
SAMUEL L. DEVINE, Ohio
(Ex officio)

CLIFFORD ELKINS, *Staff Director*

CONTENTS

	Page
Text of H.R. 3502	2
Statement of—	
Biglane, Kenneth, Director, Oil and Special Materials Control Division, Environmental Protection Agency	64
Garner, Elmer, Chief, Railway Division, National Transportation Safety Board	3
James, Raymond K., Chief Counsel, Federal Railroad Administration, Department of Transportation	17
Jorling, Thomas C., Assistant Administrator for Water and Waste Management, Environmental Protection Agency	64
King, James B., Chairman, National Transportation Safety Board	3
Palmer, James D., Ph. D., Administrator, Research and Special Programs Administration, Department of Transportation	17
Santman, Lee, Director, Materials Transportation Bureau, Department of Transportation	17
Styles, Thomas, Assistant Director, Bureau of Accident Investigations, National Transportation Safety Board	3
Additional material submitted for the record: Department of Transportation, Office of Safety, staffing authorized by the Congressional Authorizations Committees, Raymond K. James, Chief Counsel, Federal Railroad Administration	62

AUTHORIZATION FOR THE HAZARDOUS MATERIALS ACT FOR FISCAL YEAR 1980

TUESDAY, APRIL 10, 1979

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON TRANSPORTATION AND COMMERCE,
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to notice, in room 2318, Rayburn House Office Building, Hon. James J. Florio, chairman, presiding.

Mr. FLORIO. The Subcommittee on Transportation and Commerce of the Interstate and Foreign Commerce Committee will come to order for the purpose of conducting hearings on the Hazardous Materials Transportation Act reauthorization for fiscal year 1980.

Recent events have more than highlighted the urgent need to coordinate Federal programs to respond to the problem of transportating and disposing hazardous materials.

Sunday's derailment of a Louisville-Nashville train carrying 28 carloads of explosives and caustic chemicals only serves to point out the critical importance of such a program. The subcommittee must take a critical look at the Federal Railway Administration's safety program as it affects the movement of hazardous materials.

Local fire departments and civil defense groups should not be expected to handle such life-threatening incidents without Federal assistance. Despite a 1975 congressional mandate, the Department of Transportation has not yet implemented a national response center to provide those groups with vitally needed expertise.

In addition the near accident at the Three Mile Island nuclear generating plant raises questions regarding DOT's lack of regulations for the transportation of radioactive wastes. By not enacting such regulations, DOT has created a void which may very well be filled by piecemeal regulations imposed by States and municipalities. Such action may impede the orderly flow and transportation of the nuclear wastes generated at that particular facility.

The subcommittee places a high priority on the safe and efficient movement of these important, yet dangerous, materials. Therefore, we look forward to our witnesses providing information to assist us in not only reauthorizing this program, but in making the appropriate improvements.

Without objection the text of H.R. 3502 will be printed at this point in the record.

[The text of H.R. 3502 follows:]

96TH CONGRESS
1ST SESSION

H. R. 3502

To amend the Hazardous Materials Transportation Act to authorize appropriations for fiscal years 1980 and 1981.

IN THE HOUSE OF REPRESENTATIVES

APRIL 5, 1979

Mr. STAGGERS (by request) introduced the following bill; which was referred jointly to the Committees on Interstate and Foreign Commerce and Public Works and Transportation

---

A BILL

To amend the Hazardous Materials Transportation Act to authorize appropriations for fiscal years 1980 and 1981.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 115 of the Hazardous Materials Transportation Act (49 U.S.C. 1812) is amended—

(1) by striking out "and" after "1978,"; and

(2) by inserting immediately before the period at the end thereof the following: ", not to exceed $4,351,000 for the fiscal year ending September 30, 1980, and such sums as are necessary for the fiscal year ending September 30, 1981".

Mr. FLORIO. Mr. Madigan?

Mr. MADIGAN. No comments at this point.

Mr. FLORIO. Our first witness is Mr. James King, Chairman of the National Transportation Safety Board. Mr. King, we welcome you to the committee.

STATEMENT OF JAMES B. KING, CHAIRMAN, NATIONAL TRANSPORTATION SAFETY BOARD, ACCOMPANIED BY THOMAS STYLES, ASSISTANT DIRECTOR, BUREAU OF ACCIDENT INVESTIGATIONS, AND ELMER GARNER, CHIEF, RAILWAY DIVISION

Mr. KING. Thank you, Mr. Chairman. I would like to introduce the gentlemen at the table with me. On my right is Mr. Elmer Garner, who is the Railroad Accident Division Chief. On my left is Mr. Thomas Styles, the Assistant Director for Major Investigations of the Bureau of Accident Investigations. Mr. Styles is the gentleman who wrote the report relative to safety evaluation on FRA, which was a special study.

Mr. Chairman, this morning I came here knowing of your concern, it has been expressed to us, to give you an update on the events as best we have them at Crestview, Fla. relative to the L and L. & N. derailment there.

First, Mr. Chairman, the factual material as to the number of cars involved in the train, there are some overviews that you may be interested in. We don't have a prepared statement. This is just a briefing, sir. With your permission, may we proceed?

Mr. FLORIO. Yes.

Mr. KING. Thank you. Since 1976 the Board has investigated approximately 34 L. & N. accidents; 29 of those are field reports and there have been five major accident reports. From these accidents we have had 33 people die, 356 injured, and more than 24 million dollars' worth of property damage. This does not count the thousands of people who have been forced to evacuate their homes during various and sundry accidents.

With this particular incident, it's basically a chemical train. The train itself had a total complement of approximately 122 cars; 5 were locomotives and a caboose that were not counted in the total when they described the train. That gives us, Mr. Chairman, a total approximate weight of about 10,600 tons. If you like that is about 21 million pounds of weight to be moved. So that the train management becomes critical with a train this size.

Our concern was that the L. & N. hasn't had the kind of training program or safety program or the kind of discipline and leadership with their personnel to permit the kind of high risk transportation that management determined for this particular train. I would like to think that this kind of an operation is unusual with the L & N. It is not.

We would like to bring to your attention, Mr. Chairman, and the attention of the subcommittee that management makes many of the safety decisions. When a catastrophic or near-catastrophic event occurs, there is a question of was there a failure of the regulators or of anyone else.

At this time, Mr. Chairman, we have not been able to approach the wreckage. This is 50 hours after the accident. The emergency

teams pulled out along with our investigation teams. They're hoping to get back in there today.

The lading with the exception of the anhydrous ammonia and the chlorine gas, was an ordinary chemical lading. But let me take just one of these substances: The carbon tetrachloride, which is not usually considered a hazardous material per se. I think many of you are familiar with it. But if it gets anywhere near fire, it degenerates into phosgene, a poisonous and obviously very toxic gas.

On Sunday we had the explosion and then the fire that has continued. Part of the problem has been a mixing of various types of chemicals.

As you probably noticed, with the exception of one car in the derailment, all the other cars were carrying some sort of chemical. That was one of the concerns that we had, Mr. Chairman.

Why don't I pause here with the update that we have? I know that you have had additional materials. We will continue to keep you advised, Mr. Chairman once we get to the site. When we're able to start the actual investigation, we will keep the committee advised as we go along. Again, we know of your interest, sir.

Mr. Styles is with us to directly discuss our special report on the FRA. He's the gentleman who directed that program, so he may respond to any questions that you have. I am prepared to respond to any questions you might have.

Mr. FLORIO. Thank you.

Mr. MADIGAN. Mr. King, of these 34 accidents on the L. & N., are you prepared to summarize for us exactly what caused those accidents? Can you give us the cause by category?

Mr. KING. I have a list. On the field accidents, a number that were undetermined, yes, I think we can.

Would you like the dates so that the record would show that? Would you like me to read these into the record?

Mr. MADIGAN. Yes.

Mr. KING. May 11, 1976, you're going to have to help me with some of these. In Fayuka, Ind., inadequate procedure.

Mr. MADIGAN. Excuse me. I promise not to interrupt you each time. That would be a very vague sort of thing to say, as far as I am concerned.

Mr. KING. I'm sorry. I'm reading a summary sheet. It gives me the place the employee starts by train 1, property and the finding of inadequate procedure. All I have is a summary sheet. I can supply a report sheet, for the record, sir.

Mr. MADIGAN. I don't know what inadequate procedure would mean.

Mr. KING. Why don't I yield to Mr. Garner to give you a description of inadequate procedure as it is written for our purposes.

Mr. GARNER. Inadequate procedure in this particular case would have been a situation where the train crew probably used a company procedure which was inadequate and thus allowed or caused the derailment.

Mr. MADIGAN. Is it possible to tell from these records whether or not any of these derailments are the result of inadequate or faulty track? And if so, how many?

Mr. GARNER. Yes. I would like to run through that if I may. We have had 17 of the accidents that were derailments.

Mr. MADIGAN. Approximately half.

Mr. GARNER. Yes. That is correct. We do not have a breakdown as far as track was concerned, or any other causes. But half of the accidents that we investigated were derailments. We have the speeds at which they occur. The major speed, of course, was between 40 and 44 miles per hour. We had five accidents occur at that particular speed. We had three accidents each that occurred between 45 and 50, 35 and 39, and three at 20 to 24. The other three accidents occurred below 15 miles per hour.

So this is indicative of the fact that basically the accidents occur at most any speed. I would say the major portion of these accidents did occur as a factor of track conditions.

Mr. MADIGAN. You think the major portion did occur because of track conditions?

Mr. GARNER. Yes, sir.

Mr. MADIGAN. Is the weight of these cars in any way related to that?

Mr. GARNER. I am sure the weight of the cars is a contributing factor to it, yes, sir.

Mr. MADIGAN. This is a fairly new area to me. Does the present regulatory power of the Federal Government allow the Federal Government through one of its agencies to inspect various roadbeds and say that this roadbed in effect is not safe for the operation of certain types of tank cars above a certain gross loaded weight? Is that within the regulatory power of the Government now?

Mr. GARNER. I am sure it would be. But I feel certain that the Federal Railroad Administration could answer—would have a better opportunity of answering that question better; yes, sir.

Mr. MADIGAN. Do you feel that the number of inspectors presently available, presently employed in the work of trying to avoid these kinds of situations, is an adequate number?

Mr. GARNER. I think if they are properly used, they probably are adequate, yes, sir, as far as numbers are concerned.

For an example of what I mean, I don't believe that the Federal Railroad Administration inspectors should be used to make complete inspections of the track. I think they should be used to see that the track is properly maintained. That should be a job for the railroad to do, to make their own inspections.

Mr. MADIGAN. Other than the issue of track conditions, what do you think would be the principal contributing factor to these derailments?

Mr. GARNER. The other contributing factor would be equipment and management of the train, operating rules, human factors.

Mr. MADIGAN. I have no other questions.

Mr. FLORIO. Mr. Russo?

Mr. RUSSO. I am trying to find out what the purpose of the National Transportation Safety Board is, what they do, what are the actions. Doesn't the FRA have some type of board that does basically the same thing you do?

Mr. KING. We are not the regulators, We investigate catastrophic accidents in five transportation modes: aviation, railroad, highway, marine, and pipeline, and we make safety recommendations to

those agencies which have regulatory or operational authority. We have no regulatory or enforcement authority.

Mr. RUSSO. Do you make any recommendations to the FRA on safety factors?

Mr. KING. Yes, we do.

Mr. RUSSO. Have you had an opportunity to get any information about the condition of the track at this particular spot?

Mr. KING No. No one has been able to really get in there. They started to pull the equipment. The railroad removed the cars that were there on the track and not derailed. But they haven't been able to get on the site.

We had an acetone tank car burning. And we have had leakage of a 105 chlorine car, plus we think there is some phosgene being produced from the other car that seems to have a leak. One of the anhydrous ammonia cars is also leaking. We have a combination of highly toxic materials.

In addition the carbolic acid car, is hanging over the river.

Mr. RUSSO. As I understand it, prior to this accident, there was a restriction on this section of track of less than 30 miles an hour. Is that correct?

Mr. KING. That is what we understand, sir.

Mr. RUSSO. And that reason was because of previous accidents in this particular area?

Mr. KING. I can't vouch for the area, Congressman, but the L. & N. record of accidents had been substantial. Again, when I cite——

Mr. RUSSO. When you said substantial, when you put a certain amount of track under restriction, you do it because there must be something wrong with that particular section of track.

Mr. KING. I would have to yield to the Federal Railroad Administration to respond to you on that. I couldn't really do that.

Mr. RUSSO. They don't consult with you at all as to whether you feel a condition of track is good or bad after the accident takes place?

Mr. KING. That is correct. One of the reasons we exist is that we quite frankly don't have a backside to cover. When an accident occurs one of the questions is whether the Government agency responsible for regulating has been deficient in any way. It is difficult for the regulating agency to investigate itself.

The Safety Board is an independent agency created by Congress to investigate these catastrophic accidents make safety recommendations.

Mr. RUSSO. What can we do to stop it from happening in the first place? When I see something like the National Transportation Safety Board, it would seem to me that if there were any changes that were going to be made—if you were going to rescind an order—that maybe you ought to be consulted. You seem to be the experts in some serious accidents.

Maybe you would be able to tell the individuals whether or not they shouldn't remove the existing restrictions.

Mr. KING. We don't have the capacity. We don't have the personnel or the capacity to go into the field and make onsite inspections.

Mr. RUSSO. But then is the FRA now going and inspecting?

Mr. KING. To the best of our understanding, yes, sir.

Mr. RUSSO. And you do it also?

Mr. KING. We investigate to look for the probable cause of the accident and then to make recommendations. We call them as we see them. FRA and other agencies may want to characterize themselves differently, but they're for violations. We are not interested in violations. We look for what happened in the accident and then, to the best of our knowledge and judgment, how could a similar accident be prevented.

Mr. RUSSO. It is too early for you to have that information?

Mr. KING. As I say, we haven't been able to get onsite yet.

Mr. RUSSO. The gentleman from Illinois, Mr. Madigan, was talking about tonnage. Do you know the weight of the cars that have been derailed?

Mr. KING. We have a combined train weight of 10,600 tons. On this particular track, because of the explosion, we don't know how much has been disrupted. We want to reconstruct what had happened. We will go in there with the team and check all of that.

Mr. RUSSO. What basically happens when there is a major accident like this. What is the procedure that follows? Are you contacted?

Mr. KING. Yes, but they go out to look for whatever violations there were. We are not interested in violations. We look for what happened in the accident and then, to the best of our knowledge and judgment, how could such an accident happen.

Mr. RUSSO. It is too early for you to have that information?

Mr. KING. As I say, we haven't been able to get onsite yet.

Mr. RUSSO. The gentleman from Illinois, Mr. Madigan, was talking about tonnage. Do you know the weight of the cars that have been derailed?

Mr. KING. We have a combined weight, which was 10,600 tons on the combined train, the weight of the train. That is why we were saying on this particular track, we don't know because of the explosion, we don't know how much has been disrupted. We want to reconstruct what possibly had happened. We will go in there with the team and check all of that.

Mr. RUSSO. What basically happens when there is a major accident like this. What is the procedure that follows? Are you contacted?

Mr. KING. Yes, sir.

Mr. RUSSO. Who would be the first Federal official on the scene? Who is charged with that responsibility?

Mr. KING. Many times it is the closest person in proximity. Again, we have some regional offices. We have a small regional office in Atlanta. We dispatched immediately a person out of Atlanta, I believe.

Mr. RUSSO. Could you just briefly for this committee tell us what happened? When the National Transportation Safety Board got the call, what happened? What was the procedure?

Mr. KING. I was on the road. Mr. Garner was at home. It happened on Sunday and Mr. Garner was contacted at home, Why don't I let him pick up, because he contacted me?

Mr. RUSSO. OK, just so we know what happened.

Mr. GARNER. The accident occurred at 8:10 a.m. I received the first call, I would say, around 10 a.m. on Sunday morning. I imme-

diately called the Atlanta field office and contacted one of our investigators at that point.

He arranged to obtain some additional information and he was enroute by 10:30 a.m. to the scene of the accident. Unfortunately, he had to drive, because there was not any available air service to the point.

He arrived at the scene of the accident, I would say, around 5:30 or 6 p.m. He made a brief inspection and then called me back. When we found out what the details were on the accident, I contacted the member of the Board who was on the go team.

It was decided at that time to send the go team and the member down, and arrangements were made for the following morning. They left for Florida at 9 a.m. the following morning. We were on the scene by 11:15 a.m.

Mr. RUSSO. Of the following morning?

Mr. GARNER. Yes, sir.

Mr. RUSSO. Was there anybody from the FRA there before your men got there at 5:30 p.m.?

Mr. GARNER. I can't tell you whether they were there before our people, but they were there when we got there or shortly thereafter.

Mr. RUSSO. I guess the FRA is going to testify as to when they were on the scene.

Thank you, Mr. Chairman.

Mr. FLORIO. Mr. Lee.

Mr. LEE. Thank you, Mr. Chairman.

Gentlemen, a couple of questions. No. 1, do you think there are some railroad lines in the country which simply should be shutdown completely because of the fact that they are not meeting minimum safety standards?

Mr. KING. No, sir. We felt the L. & N. had a very poor safety record, as you are aware. We don't want to make management decisions for any railroad property. What we do want to do is heighten safety awareness.

We feel on the L. & N., and we have recommended this prior to this accident, that the L. & N. management has failed to maintain a level of safety and competence in their employees for those risks that must be taken. We are not talking about an accident-free environment. We are talking about detectable areas where there was a failure or act by employees who were unfamiliar with the rules, not properly trained for the positions that they were in. That is management's responsibility. And there hadn't been any discipline. There hadn't been any follow through. There hadn't been any leadership.

I know there has been a change in the corporation just recently. And we are hopeful that this will change. But we feel that we have to speak on that issue that we deal with.

It was a management decision to take a property that has had a very poor accident picture and take a very long, very heavy train that is very difficult to manage, and make basically a chemical train over 60 cars carry chemicals. And as you saw the lading on this accident, with the exception of the cattle and feed, every other car was carrying some type of chemical that could create a problem. In combination they could even be catastrophic.

When the first accident occurred, sir, we had an explosion. It was a BLEVE, basically. It was very, very rapid, though. Then we had toxic spreads. Had these chemicals been released in a settled area, results would have been tragic. That is why we went in as a major accident.

You say what is a catastrophic agency doing on an accident in a swamp? Because of the catastrophic potential of what happened down there, we are very concerned. So, if we can avoid it in some manner or give advice as to how this may be avoided in the future, that is why we really got involved sir.

Again, to be responsive to your question, no. We expect management to carry out its management responsibilities. But if we see areas where the public is being jeopardized, then we feel it is our responsibility to speak out and make them aware of that, sir.

Mr. LEE. What you are saying, it appears that we are leaving it completely to managerial discretion. Conceivably we are going to have circumstances or situations where the public safety is in jeopardy because of the lack of prudence by management.

Mr. KING. It is really our hope that management in this case will get itself together. The FRA seems, at least, to be aware of it. I don't know whether they have an action program. I haven't consulted with them, in all candor. That would have to be worked out with them.

Quite frankly, we try to complete the investigation and bring those issues to public attention and then hope that the parties involved will act. We try to act, then, also as persuaders. We speak to safety, other agencies speak to regulations.

Mr. RUSSO. Would the gentleman yield?

Mr. LEE. Yes.

Mr. RUSSO. You have mentioned that the L. & N. has had a bad track record. Did you mention some of the previous accidents?

Mr. KING. Yes, sir.

Mr. RUSSO. Did you make certain recommendations at that time?

Mr. KING. Yes, sir.

Mr. RUSSO. Were those recommendations followed?

Mr. KING. What is the status on the L. & N.?

Mr. GARNER. The last major investigation that we made was in Florence, Ala. In this particular case, it was recommended that the management take action to correct some of the conditions basically that Mr. King talked about. Unfortunately, it has been recently issued and we have not had a report back from the L. & N. on their activities as yet.

Mr. RUSSO. When were the recommendations made?

Mr. KING. Those were made March 6, 1979. This was an accident under investigation from September 18, 1978.

Mr. RUSSO. Did you make recommendations on the Waverly accident.

Mr. KING. Yes, sir. The Waverly accident—in this case we made several. First, the Waverly accident was the failure of a Southern wheel, the high carbon wheel. Its failure mode was through to the axle. It broke on the car in front. The train derailed because of the equipment failure. A wheel grazed the side of the car in question. Then later the tank failed and dumped the product, which was propane, out into the source of ignition and that ignited.

What we did was to stress the removal of the steel wheels as an emergency basis. First, we asked that no Southern carbon wheels be on a train that has hazardous materials. That was requested as an emergency order. That was done.

Then we asked for an inspection of all cars to remove those wheels as expeditiously as possible. To the best of my knowledge, FRA acted expeditiously——

Mr. RUSSO. After you make these recommendations, who does the followup on this?

Mr. KING. FRA or the property——

Mr. RUSSO. What enforcement ability do you have?

Mr. KING NONE.

Mr. RUSSO. Did you ever find L. & N. tracks to be in bad condition and make recommendations that they be upgraded before any cars go over that track?

Mr. KING. Not to my knowledge.

Mr. GARNER. Yes, we have. In previous major accident reports that we have issued as part of the accident investigation, it was found that there were certain defects found in the track structure. It was recommended that these be corrected and they were corrected.

Mr. RUSSO. So you just deal with one isolated incident?

Mr. GARNER. That is correct. We do not make an overall inspection of any particular property.

Mr. KING. So we might deal only with a mile of track, Congressman, rather than the whole thing that led up to it.

Mr. RUSSO. Thank you, gentlemen.

Mr. LEE. Mr. Chairman, I yield back my time,

Mr. FLORIO. Thank you very much. I would just like to ask a few questions.

I think you started to point out in your comments what you thought the major deficiency was in the safe transportation of hazardous materials. You have indicated that you have limited your jurisdiction to certain areas.

I have reviewed the testimony of our next witness and it is full of indications that there is limited authority. There are a great number of different agencies that have a portion of the regulatory authority.

The process of enforcing regulations is parcelled out among a great deal of agencies. If nothing else comes out of these hearings, an appreciation of the need for greater coordination must.

We focused in on this one particular railroad because of the accident which just occured within the last few days. However, the committee has statistics from 1977, the most recent available, which indicate that this particular railroad is fifth in terms of frequency of derailments.

That is to say, there are four other railroads which have more frequent derailments than this particular railroad. So, this is a problem that is not just unique to one particular entity. It is something that is prevalent within the industry. What I would like to do is ask a few questions with regard to this specific incident so we might illustrate what typically does or does not happen with regard to the response.

To this point in your presentation, sir, you talked about the lapse of almost 24 hours before you or other officials arrived on the scene. This highlights the need for a local emergency response capability, which is one of the functions of the Materials Transportation Bureau. This function, as far as I am concerned, to provide for the training which would enable local people to be on the site and in a position to capably deal with the immediate problems associated with a derailment such as this.

You say that you are not sure when the other Federal officials were notified. Do you have any idea as to what took place immediately after the accident? Specifically, do you know who took charge on the scene?

Mr. KING. Right at this time, we don't know. When we have our report, when that is written up, that is included, Mr. Chairman. As to what the command decisions, who made them, who took over, we know——

Mr. FLORIO. It would be very helpful if you could place the events into timeframes which tell exactly what happened at what point. Do you know if the Chemtrec number was called?

Mr. KING. No, we do not, but we can check on that, There is one thing on that, Mr. Chairman. The people who were there, the Civil Defense people, had had some concerns. I know they have been in touch with our office prior to this accident. They wanted to know whether they could get bills of lading.

We have tried to reach them, as a matter of fact, as recently as last week. So, there has been some concern by the local people who were there.

The question is on the bills of lading. Simultaneously, we have been talking about developing a one call system, Mr. Chairman that is designed to meet local needs. We are stressing that, because our fears have been that the program is designed, quite frankly, to meet the needs of people in Washington, rather than people who are standing on an accident site, who have emergency responsibility to their community.

Quite often they are the ones who suffer the greatest casualties in a case of a catastrophic accident.

In the case of a BLEVE, for example, the timeframe occurs 25 minutes after the accident and fire impingement. Then we have a catastrophic explosion.

Emergency people need information here and now. If they can be patched into a phone. Right now, we don't see that being designed. We have met with the firefighters. We have met with the police. We have met with the State people over the past week and a half.

They have designed a program, and are bringing it into DOT asking them to take a look at it. So that program and that one call system would be responsive to their needs.

Mr. FLORIO. Industry representatives, when I have directed the question to them, have ways represented to me that there is a manifest on board which indicates the contents of all of cars. If this is the case, wouldn't the manifest be immediately available to local officials?

Mr. KING. Yes; but you don't know the byproducts of the particular accident. First of all, you are talking about a train of 120-some-odd cars. That is a fair distance apart. Your crew is at the head

and at the caboose, plus you are talking about a crew that can be scattered. They might flee in this case if there is a explosion or fire.

If they know there is toxic gas, they would leave the scene. There may be a chance that they might be missed with the manifest they carry.

Second, it is very difficult if you are a local firefighter to maintain a high level of skill in dealing with some of these fires, because they are episodic events in your life that will probably never occur to the same fire department again.

It may be reoccurring on a national basis, but rarely with the same fire unit. There are some exceptions. I think Houston, Tex. would probably be an outstanding example of the exception. But as a rule it is very difficult to keep a high level of training on how to deal with all 15,000 different hazardous materials.

Mr. FLORIO. Has your agency and FRA been able to come to a more expeditious implementation of the program to retrofit tank cars? In regard to this specific accident, do you have any information as to whether or not these tank cars were ones which had already been retrofitted?

Mr. KING. First, we know they had a shelf coupler on them. We haven't been into the scene, but they wouldn't be on the rails right now. FRA has, by all reports, been scrupulous in getting the shelf couplers on and the industry has worked in cooperation. About 25 percent had head shields.

We haven't been to the site, so we don't know if these particular cars had head shields. Not all of them, by the way, are the 112 and 114 car, pressurized tank car. A number of the products on this, it would be didn't need a pressurized car.

So, they might very well be on a 111 type or another type of car, which wouldn't require by regulation the protection that a shelf coupler and a head shield would give.

Mr. FLORIO. It would be very helpful to this committee to know if the assumptions from which we have been working are true in regard to determining the criteria by which cars should have these retrofitting devices attached to them.

If in reality, we are either over- or under-regulating, we would like your evaluation of the onsite impact of having the cars retrofitted.

Mr. KING. There is one problem on this, Mr. Chairman. That is, the explosion followed immediately after the wreck. We will try to do an analysis of what was caused by the wreck and what was caused by the explosion. We will try to get an analysis out of this.

We share your concern and your interest in this particular item.

Mr. FLORIO. Shifting for a moment to the Harrisburg incident; it is my understanding that nuclear materials are now being transported away from the Harrisburg facility. It is also my understanding that because of the failure of the MTB to implement a regulatory scheme dealing with the transportation of nuclear wastes, the localities are authorized to, and in fact, are, passing ordinances that prohibit the transportation of such materials through their municipalities. Have you followed this whole development?

Mr. KING. Mr. Chairman, I must admit at this time that we have several items. This really hasn't come to our attention. It is trans-

portation when they move it, but we are not in the regulatory scheme. We don't have a record of accidents of this type, other than transportation of yellow cake, which we have in the West where there have been some problems.

Mr. FLORIO. Do you monitor the activities of the Transportation Bureau?

Mr. KING. We monitor them in broad terms, Mr. Chairman. But in the specific instance you talk about at this moment, no, sir.

Mr. FLORIO. Let me just conclude with a question regarding your evaluation of the emergency response training that is or is not taking place out of this agency. I happen to believe that the certain something we should be trying to do is to avoid accidents, although they will occur.

I do not see the best hope for limiting the damage from these accidents coming from Federal officials who take 24 hours to get to the scene of an accident. The fact of the matter is, local people have to be trained to take charge. That training should be taking place.

My understanding is that it is not taking place in a cost efficient, economical, or realistic way. I would appreciate your observations on what is taking place.

Mr. KING. We have continued to encourage this. The training you are talking about is a substantial number of firefighters and emergency response people of a volunteer nature. There is a fairly high turnover.

There are a number of excellent local, county, and State firefighting schools. It is developing a curriculum where many of the firefighters go on their own time, go on vacations, take their own time for additional training so that their skills can be upgraded.

They do deal in a lot of these schools with hazardous materials. It is in developing a curriculum and reading materials that would be helpful to the firefighters that the Federal Government might best serve.

The State, and in some cases the county, service their firefighters very well. It is a real interest. There is a national organization. We try to keep in touch, but it is on curriculum development and support.

We are talking about the time when you are standing on a site, whether it is a railroad or a truck. You have an incident in front of you and you want to reach out. You have the kinds of communications equipment now which people can pick up and patch into a phone, even with a two-way radio, and seek information when faced with a given hazardous material.

I think it is awfully difficult to memorize the fact that, for example, carbon tetrachloride under heat becomes phosgene, which is highly toxic.

And yet if you are just familiar with carbon tetrachloride, that will not be a real concern to you. If you got on the phone and were able to talk to someone very quickly and said, "Here is what I am faced with. Here is what has happened." And the person says to you, "You are going to have this much water to control it. Can you pull up any hoses? Do you have access to that?"

If the local firefighter says no, then maybe the best thing you can do is evacuate.

Firefighters are trained to go in there and fight, literally, the emergency. And it is a very difficult thing at times to turn around and say, "Pull back, That is the only thing you can do. You are dealing with a situation that is bigger than you or your equipment. Hold back. Evacuate the area."

That is the sort of help and advice the local communities really call out for.

Mr. FLORIO. Are you familiar with some of the industry-initiated programs, particularly the chemical industry's?

Mr. KING. Yes, sir.

Mr. FLORIO. How would you stack them up against the Government-initiated programs?

Mr. KING. I think they serve a purpose. I would like to see a broader system. But Chemtrec does, too——

Mr. FLORIO. I was talking more about the training programs.

Mr. KING. Oh, I have seen one training film that was developed, I gather, with the industry and the Association of American Railroads. Again, you are training for an event that is highly unlikely and very episodic. It is very difficult to maintain a high level of awareness and skill on something of that nature.

It is useful. There is no question about that. The real question is what would have the greatest impact with the emergency personnel on the scene of an accident.

We agree with you, Mr. Chairman. We are absolutely pursuaded that as a local community, people are going to provide leadership at the time of the accident, many times at the most critical part of a catastrophic accident.

That is why they need the best possible information on all dimensions of that right away.

Mr. FLORIO. Thank you.

Mr. Madigan?

Mr. MADIGAN. Thank you, Mr. Chairman.

Wouldn't it be better if we could somehow reduce or eliminate these freight train derailments, rather than worry about the education of local fire departments and the training that they could receive or perhaps should receive? Would our attention not be better focussed on the problem—

Mr. KING. There are two things. Ninety percent of the hazardous materials spill on the highway. We hear more of the railway because of the nature of them. You get a jumbo tank car out, that is the volume of three trucks. If you put a string of them together, such as we had on this, in order to just duplicate the fire from the acetone, we would have to have had nine trailer trucks piled up at the same place at once.

Mr. MADIGAN. Excuse me. Were there more railway freight car, tank car derailments in 1978 than there were in 1968?

Mr. KING. I believe that is correct, sir.

Mr. MADIGAN. And more in 1978 than there were in 1958?

Mr. KING. Yes, sir.

Mr. MADIGAN. Didn't we establish a few moments ago that approximately half of the tank car derailments from the L. & N. were because of faulty track positions?

Mr. KING. That the maintenance of way represents, not just with N, but across, if you were to look at the national picture, about

half of your derailments are identified as maintenance of way problems.

Mr. MADIGAN. Did the gentleman on your right testify that these tank cars were derailing at speeds of less than 15 miles per hour?

Mr. KING. We had three accidents that occurred at 15 miles per hour or less. At lower speeds you don't have ruptures, as a rule.

Mr. MADIGAN. Did we not also establish that the Federal Railroad Administration has the regulatory power to say that the L. & N. or to any other operating railroad, that you no longer are going to operate those tank cars over that right of way until you get fixed up?

Mr. KING. That is correct, sir,

Mr. MADIGAN. Are they not being derelict in their duty by allowing these operations to continue?

Mr. KING. Again, we do not know in this instant case whether it was maintenance of way problems, whether it was management of the train itself or whether it was an equipment failure. That is why I hesitate to speak to that.

Mr. MADIGAN. I am not talking about this instance. I am talking about all of the instances, where you say that half of their accidents are because of track conditions.

Mr. KING. Yes, sir.

Mr. MADIGAN. Those accidents, about 50 percent of the total that you know can be directly related to track conditions. Could they have been avoided if the FRA had said, "Get that track in condition or stay off of it"?

Mr. KING. I would hesitate. As much as I would like to support you in your contention, I would hesitate to say that FRA could consult all the track problems, because we are talking across the board.

The FRA investigation, as I understand it—they can speak to that far more capably than I can, sir. But they are there to do spot checks, to make sure the inspection work is being properly done by the railroad, that they are visiting.

As I understand their role, they are not there to investigate each mile of track and basically federally certify it. If you see a company that seems for economic reasons or poor management reasons not to be meeting its responsibilities, then we have recommended that obviously there should be an accelerated oversight by FRA of that particular property, so that it doesn't degenerate into a highly hazardous situation.

Right of way problems many times have dealt with lowering the standard of the track, and therefore lowering speed. FRA tries, I assume, to keep the system operating but I am speaking to their issue, sir.

Mr. FLORIO. Would the gentleman yield?

Mr. MADIGAN. Yes.

Mr. FLORIO. About 6 months ago, I was informed that there are only 50 Federal inspectors, real inspectors, out walking tracks. I suppose this figure verifies your contention that it is impossible to monitor those people who are actually going through all the trackage in this country. And therefore, one has to rely on the railroad inspection systems personnel.

The danger, or the hazard, of that—it has worked out very dramatically to me. I had occasion on a Monday to walk a particular track in my district on which there was a derailment. It was indicated that this was a 40-mile-per-hour track. The next day we brought the Federal inspector to the site and he immediately ordered the track speed reduced to 10 miles an hour—the same track, the same site, the same location.

But the really impressive and very scary fact was that ConRail's own inspector was called out that same day and asked to respond to the contention that this was a 10-mile-an-hour track as opposed to a 40-mile-an-hour track.

The Federal inspector and the ConRail inspector both agreed that the Federal standards' discretion would enable both of them to agree that it could be a 10 or it could be a 40-mile-an-hour track.

In other words, even though there are set objective standards, their interpretation of those objective standards allowed them to come to their own separate conclusions.

I have some serious questions about allowing local people, that is, the railroad people, to have this great sense of discretion.

Mr. KING. I would say we are talking about, I believe, class 3 track being graded down to class 1. The regulations as written and the differences between 1 and 3 are considerable. I am talking about ties and spiking.

If it is not continuous welded, there is a whole series of things that are very, very different. Maybe they saw a wide discretion. I haven't seen the tracks, so I don't dare speak to it. But track standards do vary from one class to another.

Mr. FLORIO. Do you know the number of Federal inspectors who are actually out?

Mr. KING. I don't have a number, Mr. Chairman, but I can furnish that for the record.

As of March 31, 1979, the Federal Railroad Administration was authorized 109 track inspectors—they have 64 on board.

Mr. FLORIO. Thank you. Thank you very much.

Mr. KING. Thank you, Mr. Chairman.

Mr. FLORIO. Our next witness is Dr. James Palmer, the Administrator of the Research and Special Programs Administration of Department of Transportation. He will be accompanied, I understand, by Mr. Raymond James, Chief Counsel of Federal Railroad Administration.

We welcome you to the committee. We would ask for the record that you introduce your colleagues. The committee and staff has had an opportunity to review your 19-page statement in detail. Accordingly, if it is without objection, your statement will be introduced into the record in its entirety, and we ask you to proceed in a summary fashion.

STATEMENT OF JAMES D. PALMER, PH. D., ADMINISTRATOR, RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION, DEPARTMENT OF TRANSPORTATION, ACCOMPANIED BY RAYMOND K. JAMES, CHIEF COUNSEL, FEDERAL RAILROAD ADMINISTRATION, AND LEE SANTMAN, DIRECTOR, MATERIALS TRANSPORTATION BUREAU

Dr. PALMER. Thank you, Mr. Chairman. With me from the Materials Transportation Bureau, Mr. Lee Santman on my left, who is the Director; and on my right, Raymond James, Chief Counsel of the Federal Railroad Administration, joins me particularly because of the concern for the accident that has recently occurred in Crestview, Fla.

I would appreciate it if my testimony could be inserted in the record.

If I might just briefly enter into the record, the purpose of being here is the reauthorization bill for the Hazardous Materials Transportation Act of 1974, H.R. 3508, which is before you. It is the topic of discussion.

In order to proceed, I would request of the Chair, would you care to proceed first with the continuance of your discussion on the L. & N. accident?

Mr. FLORIO. I think it might be appropriate for you to give us some indication as to your thoughts contained in your statement with regard to the authorization.

As I indicated at the outset, this is primarily a hearing on the reauthorization. But the timeliness of this particular accident certainly does provide us with a very graphic opportunity to see how law is or is not being implemented, how the responsibilities that your agency is charged with are being carried out.

Dr. PALMER. In that case, I would briefly go through some of the aspects of MTB and its operations within DOT and the relationships of MTB.

First of all, since our last appearance before this committee just 1 year ago, MTB has been quite active in carrying out its mandates under the Hazardous Materials Transportation Act of 1974.

In the year that has passed, we have established and maintained an annual regulatory review process. That has gone through two cycles. The first cycle was completed in March of last year. The second cycle was completed in January of 1979.

The MTB in looking at its particular needs has examined its role in regards to the exemption process. That is, those permits given to transport hazardous materials under conditions that are not covered under any particular rule.

The backlog of exemptions has been reduced by about 80 percent. And a great many of these have been incorporated in the formal rulemaking process.

The DOT, and particularly MTB, has continued to expand its cooperative relationship with the Nuclear Regulatory Commission, EPA, and other agencies as appropriate, as well as with NTSB as you have heard from Mr. King.

We have additionally represented the United States in international proceedings for uniform worldwide hazardous materials regulations.

You mentioned training. We have completed the training course for emergency response. This was done under contract to NFPA, the National Fire Protection Association. They developed the training course with funding from us and are distributing it.

We understand that over 1,500 copies of this course have been distributed to interested fire departments, anyone who has an interest in this emergency response systems training.

We have worked on the development of risk analysis methodologies to see if we can't determine through advance warning when to expect a problem to occur or to give us some indicators of how to deal with these things when we learn of particular conditions that exist in transportation.

The Secretary of Transportation charged a committee to review what the Department is doing in the area of hazardous materials. This was completed in the report of the task force that was submitted to the Secretary in September 1978.

The Secretary adopted the recommendations of the task force. These were six in number. The first recommendation was that the Department establish a standing committee to examine and look at, from an overview perspective, the transportation of hazardous materials.

Included on this committee are the Commandant of the Coast Guard, the Administrator of the Federal Aviation Administration, the Administrator of the Federal Highway Administration, the Administrator of the Federal Railroad Administration, the General Counsel of the Department, the Assistant Secretary for Policy and International Affairs, and the Administrator of the Research and Special Programs Administration.

The standing committee has been put into place. It meets on a quarterly basis within the Department to discuss issues presented to it in the handling of hazardous material.

The second recommendation was that the Secretary instructed the Coast Guard to establish a National Response Center for hazardous materials incidents, building on the already existing National Response Center, provided for in the Federal Water Pollution Control Act for spills involving navigable waters.

This Center physically is being prepared. Two consoles are being added to the already existing facility. The communications equipment has been ordered and staffing needs have been examined. It is proposed for the next quarterly meeting of the standing committee that the staffing proposals be placed before it.

We will then request of the Secretary the staffing necessary to upgrade the National Response Center to handle the number of calls that they will get in addition to those they receive under the Federal Water Pollution Control Act.

The third report recommendation was to develop a hazardous information system. This would grow out of the incident reporting system that is required under the Hazardous Materials Transportation Act of 1974. The planning for this is nearly complete.

We have been putting into place the various data bases from the modes, examining these to determine the quality and quantity of information that would assist us in providing necessary response training and other things related to handling of hazardous materials.

The fourth recommendation was to look at the consistency of the application of penalties. The Department's General Counsel has initiated this particular review, and is currently analyzing the prior history, in rules and practice, of fines and civil penalties within the Department of Transportation.

A fifth requirement was to examine training, which you have noted already as being extremely important, The Secretary has recognized this and instructed that courses be developed to provide for training in the handling of hazardous materials.

In response to this, the Department, through NFPA, provides the NFPA 20-hour course to anyone who requests it. We are planning to develop a home study course based on the first four segments of the basic NFPA course, as a means to reach part-time and volunteer emergency personnel.

Mr. FLORIO. What is the cost of that?

Dr. PALMER. It is an emergency response course for hazardous material accidents. It is developed by the NFPA to respond to the situation that occurs in the first 30 minutes of an accident.

Mr. FLORIO. What is the cost of it?

Mr. PALMER. Oh, I am sorry. Mr. Santman says that it is $350 for delivery to 20 students, but the basic course package can be used many times over with the addition of workbooks and extra handout materials provided by DOT.

Mr. FLORIO. Twenty students?

Mr. PALMER. Yes.

The final recommendation adopted by the Secretary in this task force report was the requirement that we continue our work with the various agencies who have joint authority or overlapping responsibilities in the area of hazardous material transportation.

We have proceeded to do this, working with EPA, NRC. We have existing or proposed memorandums of understanding with these agencies, and we work with the Federal Energy Regulatory Commission in the area of pipelines, which is another area involving transportation of hazardous materials, although not the subject of this hearing.

One of our responsibilities under the Hazardous Transportation Act of 1974 is to assure uniform rulemaking. We have attempted to simplify and consolidate the prior rules, and we have reduced the volume of rules by about one-third, taking three volumes down to one, trying to simplify, so that they are more understandable to those who must implement them within the carrier and shipper industries and within our own enforcement staffs.

The MTB has responsibility in the area of multimodal shippers and the area of manufacturers of packagings and containers. The Coast Guard and the Federal Highway Administration, the Federal Aviation Administration, and the Federal Railroad Administration are responsible for enforcement where there are modally specific areas.

We are guided by the words of the Hazardous Material Transportation Act that say that the transport of hazardous materials must not lead to unreasonable risks to health and safety or property. With regard to this, we issue regulations. We cooperate with other agencies. We work with requirements for training of people and

with requirements for certain kinds of shipments of materials, such as LNG.

We also provide for exemptions, which I would reiterate must provide a level of safety that meets or exceeds that provided by the current regulations, but which involves transportation not authorized by current regulations. All such exemptions are placed in the Federal Register for comment prior to our determination to grant or deny. So there is ample opportunity for people to express concern in advance of shipment of these materials.

The assessment of civil penalties for violations and the bringing of criminal actions through the Justice Department are options that are open to us, and in the case of an emergency situation involving an imminent hazard we may petition district courts for injunctive relief.

In the emergency response program: To date, MTB has developed an emergency action guide, over 800,000 copies of which have been distributed to persons all over the country.

I mentioned the 20-hour NFPA course which has been administered to about 25,000 people and the development of the National Response Center by the Coast Guard. The Center is, I hope, just a short time away from being totally operational in our behalf.

I might mention the sequence of events relating to the L. & N. accident, as an example of the already operational posture of the National Response Center even though they are not set up to handle fully all hazardous materials calls that come in.

Mr. FLORIO. We would appreciate any clarification you could give to us as to what actually happened at the site.

Mr. PALMER. According to our records, the first call in to the National Response Center came at 9:42 a.m. on April 8. This was immediately passed to the EPA region IV, largely because the Yellow River was involved with the possibility of a pollution spill in that river.

At 11:25 a.m. an additional call came in, explaining that there was fire, and the train was carrying anhydrous ammonia, alcohol, acetone, sulfur, and propane, as already noted by Mr. King. They confirmed that there was a fire and an explosion, but it was unknown at 11:25 a.m. which materials were involved. There were no industries involved, and the Yellow River was probably affected due to pollution.

At that time, the handling of the accident was by the local fire chiefs and by the local civil defense coordinator. Later on there would be three FRA regional people, and two inspectors on the scene.

[Testimony resumes on p. 40.]

[Dr. Palmer's prepared statement follows:]

STATEMENT OF DR. JAMES D. PALMER, ADMINISTRATOR OF THE RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION, DEPARTMENT OF TRANSPORTATION, BEFORE THE HOUSE INTERSTATE AND FOREIGN COMMERCE SUBCOMMITTEE ON TRANSPORTATION AND COMMERCE

APRIL 10, 1979

Mr. Chairman and Members of the Subcommittee:

I am pleaaed to be before your Subcommittee to discuss the hazardous materials program of the Research and Special Programs Administration (RSPA), particularly our activitiea since the laat authorization hearings on the Hazardous Materials Transportation Act (HMTA) (Pub. L. 93-633, January 3, 1975) held by the House Interstate and Foreign Commerce . Subcommittee on Transportation and Commerce on April 10, 1978.

The authority under current legislation to appropriate funds expires at the close of this fiscal year. We are before this Subcommittee seeking legislation to authorize future appropriations in support of the continuing efforts of the Department and the Administration to ensure safe movement of hazardous materials in commerce. Since, during recent years, there have been a number of regulatory and enforcement program initiatives, I would like to begin with some background which will underscore some of the significant advancements we have made in implementing the provisions of the HMTA. The Materials Transportation Bureau (MTB) has the Department's major development and coordinating role in the hazardous materials transportation. To ensure a uniform approach to regulation, the Secretary of Transportation delegated this responsibility to the MTB (now a part of the RSPA) when it was established in July 1975. With one exception, formulation and issuance of regulations are

79-870 O - 79 - 4

Bureau responsibilities. Regulation of bulk traneportation of hazardous materials by the marine mode remains the responsibility of the Coaet Guard, which issues, as well as enforces the applicable regulations. Otherwise, the evaluation and development of the substance of hazardous materials transportation regulations peculier to a single mode of transportation are handled by the appropriate operating administration. It coordinates this effort with the Buresu's Office of Hazardous Materials Regulation which performs a review function, applying its special expertise to the particular material involved. Notices of proposed rulemaking are then issued by the Director of the Office of Hazerdous Materiale Regulation and final regulationa by the Director of MTB.

The HMTA extended the Department of Transportation's regulatory euthority to the manufecturers of peckagings and containers used in the transportation of hazardous matsrials. The Materials Transportation Bureau exerciees enforcement suthority over these entities, as well as multimodal ehippers of hazardous materiale. However, it is the Department's four modal operating administrations - the United States Coast Guard, the Federal Aviation Administretion, the Federal Highway Administration, and the Federal Railroad Administration - which have responsibility for enforcing regulations pertaining to the respective modes of transport in addition to contributing to the development of the MTB's regulations concerning its respective mode. Thus, inspection, compliance and enforcement actions related to carriers by the specific modes ere planned end carried out by these administrations.

Several considerations led to the decision to leave enforcement responsibility with the operating administratione. First, adequate inspection requires that hazardous materials inspectors have a working

knowledge of the mode by which a shipment is being carried. Second, the operating administrations have existing field forces with considerable sxperience in inspecting hazardous materials shipments.

IMPROVED ORGANIZATIONAL STRUCTURE.

The first of the recent and significant improvements relates to our administrative structure. The increasing diversity of hazardous materials technology, the requirements for shipping materials over greater distances, and increased smphasis on international transportation of hazardous materials have contributed to the growth of this typs of transportation and to more frequent intermodal transfers of hazardous materials. This growth in volume and complexity requires careful coordination of regulatory and enforcement activities within the Department of Transportation to ensure uniformity and preclude unnecessary duplicative efforts.

Recognizing the need for a strong and efficient organizational structure to aupport the multimodal hazardous materials program, Secretary Adams reorganized the Office of the Ssecretary in 1977, by consolidating technical and research functions and, along with the MTB, placing them in the Research and Special Programs Administration. The basic mission of the MTB is still to develop and enforce programs to make the transportation of hazardous materials safe. However, our new organizational alignment strengthens the support services available to MTB, particularly those in areas of administrative, budgetary, and research and technology capability. A number of new or strengthened relationships are being dsveloped among the various RSPA elements which include the Transportation Systems Center in Cambridge, Massachusetts in the areas of data and information systems and laboratory testing, and the Transportation Safety Institute in Oklahoma City, in hazardous materials training and educational programs.

For example, in late 1978, the MTB began the process of withdrawing various delegations of authorities previously delegated to the Bureau of Explosives of the Association of American Railroads. The long overdue withdrawal of the delegations, primarily concerning packaging approvals, was possible because much of the testing and approval will now be done at the Transportation Systems Center in Cambridge, Massachusetts.

The MTB's internal organization has also undergone a reorganization which restructured the former Offices of Hazardous Materials Operations and Pipeline Safety Operations into four separate offices - Offices of Hazardous Materials Regulation, Pipeline Safety Regulation, Operations and Enforcement, and Program Support. This realignment of functions, by consolidating the common operational and support type activities, has enabled more effective utilization of resources across the two safety programs. Moreover, the separation of responsibility and management for establishing the rules and from that for implementing and enforcing them has improved both aspects of the hazardous materials program.

REGULATORY SIMPLIFICATION.

This organizational background is particularly relevant to some recent program initiatives and achievements. DOT had been concerned that the complexity of hazardous materials transportation and its regulation was leading to problems in understanding and using the hazardous materials regulations by the public. Less than three years ago, the hazardous materials regulations governing transportation by air, rail, highway, and water, and previously contained in three different volumes of the Code of Federal Regulations (Title 49, Title 46, and Title 14), were standardized and consolidated to promote ease of understanding. This effort also reduced the volume by approximately 700 pages.

As an example, the regulations dealing with shipping papers, marking, labeling, and placarding were made uniform and consolidated into Part 172 of Title 49 to form the Hazardous Materials Communications Regulations. The system prescribes uniform labels and placards which facilitate intermodal transfers and which are readily identifiable by both routine handlers and emergency response personnel who need to be alert to any actual or potential risk. These new regulations include an expanded list of definitions to enable understanding of the various terms which previously were associated with only one mode of transportation.

This consolidation has encouraged compliance with the regulations, as well as aided the Department's surveillance and enforcement efforts. The same rulemaking action removed certain regulatory requirements from small packaged goods, including common household items such as cleaning solvents and aerosol packaged deodorants, which present little hazard in transportation. The new materials classification, Other Regulated Materials - or ORM's - exempts limited quantities of such consumer goods from labeling and packaging requirements.

REGULATORY AND RULEMAKING PLAN.

Responding to both the President's Executive Order 12044 on improving government regulations and the Secretary of Transportation's internal memorandum on the same subject originally published in the Federal Register on March 8, 1978, (43 FR 9582), the Materials Transportation Bureau has developed a Regulatory Review and Development Plan. The second annual Plan, as was the first, is based on the premise that a system for setting the MTB's priorities in rulemaking activities is essential if MTB is to effectively carry out its mission to protect the nation against the risks inherent in hazardous materials transportation.

The Plan serves two purposes. It provides a framework to identify and analyze the complex safety problems and ieeues aesociated with hazardous materials transportation. It also serves as the Bureau's primary internal regulstory development and resource management tool. Ths Plan ensblee MTB to efficiently eetablish priorities for processing each of the many substantive petitions, proposals and recommendations for rulemaking actions which it annually receivee concerning hazardous materisle.

The Plan, therefore, provides RSPA management with a syetem for allocsting resources and eelectively intervening in those areas which in its beet judgment can make the greateet contribution to public safety.

The order of priority in rulemaking is a function of the goale and objectives of the program.

The Safety Program Goals are:

(1) To facilitate hazardous materials trsneportation in s manner to adequatsly protect the nation against the riske of life, health and propsrty;

(2) To reduce the numbers of accidents, injuries and fatalities in hazardous materials transportation; snd

(3) To minimize the public exposure to risk of both high and low consequsnce accidente in hazardous materials transportation.

In ordsr to achieve the Bureau's safety program goals, s numbsr of objectives havs been established. To the greatest extent possible, ws intend to:

(1) Simplify and improve the quality of existing and new regulations;

(2) Insure compatability betwesn U.S. and International safety standards in transportation;

(3) Develop and implement, a phased program to convert technical standards to performance oriented standards, where feasible, especially in the area of hazardous materials packaging;

(4) Reduce the actual impacts - e.g., size, spread, etc. - of a hazardous materials release or spill; and

(5) Minimize the population and property exposure to potentially high shipments.

Based upon these considerations, the current ordering among the major safety programs for hazardous materials is as follows:

Cargo Tank Safety and Integrity (highway)

Tank Car Safety and Integrity (rail)

Hazardous Materials Emergency Response/Communications

Radioactive Materials Transportation

Hazardous Materials Classification

Portable Tank Safety and Integrity

Model Operations Safety (Rail/Highway/Water/Air)

Packaging Safety and Integrity

The top two program areas have rulemaking priority because of the relatively high number of fatalities, injuries, and property losses that are involved with these accidents relative to the other hazardous materials safety program areas. Cargo Tank Safety has assumed the highest priority because MTB has recently completed a major rulemaking action designed to significantly improve Tank Car Safety -- which is expected to appreciably reduce both the severity and the frequency of rail tank car accidents.

The regulations adopted under Docket HM-144 in the rule published on September 15, 1977 required tank car owners to equip DOT Specification 112

and 114 tank cars with 3 protection syatema: 1) tank head protection against puncture; 2) top and bottom shelf couplera to resist disengagement; and 3) thermal protection for those cars used to transport flammable gases to prevent overheating of product. All cars built since 1/1/78 sre required to be equipped with the required protective devices. The requirement for retrofit of existing tank cars originally provided that shelf couplers be installed not later than 6/30/79, and that the balance of the retrofit be completed by 12/31/81. However, several serious accidents involving pressure tank cars prompted the Department to reconsider the retrofit timetable. As a result, shelf couplers were required to be installed not later than 12/31/78. That task was completed on schedule with few exceptions. The new timetable also requires that all tank head protection snd thermal protection be inatalled not later than 12/31/80. Further, for certain cars the final deadline is the end of this year, depending on the retrofit package employed. A complisnce reporting syatem, developed by MTB and FRA is providing quarterly status checks on the progresa of the retrofit and all indications point to the successful completion of the program without significant interruption in essential transportation service.

Therefore, even though simplificstion, clarification and uniformity have been important regulatory concerns, the primary factor in establishing rulemaking priorities and plans is the requirement for safety to life and property.

As a result of this system of asaigning priorities, we have found that rulemaking actions which are designed to enhance emergency response capabilities aasume a high priority. Included under this heading are rulemaking actions which are designed to strengthen the communication of hazardous materials information in pra- and poat-accident environments;

thus, rulemaking actions that cover shipping papers, labeling and marking requirements are a part of this major program area.

Next in order of priority is the transportation of radioactive materials - which have had an excellent safety record in transportetion, but ebout which there is considerable concern, because of the serious effects that would result in the extremely unlikely event that there was a major release in an accident.

Although we believe this year's plan to be a realistic statement of essential MTB rulemaking activities and resource commitments for the forthcoming year, allowances must be made for regulatory projects not contemplated at the time of preparation.

INTERNATIONAL AND INTERAGENCY COOPERATION.

In addition to discharging program responsibility to facilitete intermodal and multimodal shipments in commerce through its Transportation Programs Bureau, the RSPA participates in the development of international hazardous materials transport standards in order to assure e uniform acceptance of United States hazardous materials transportation practices which experience has shown to be safe and reliable. The United States objective has been to promote a world-wide system that provides necessary consistency between modal and regional recommendations to insure that, insofar as practical, hazardous materials shipments may move freely between the verious modes and regions of the world in full compliance with the applicable regulations.

Department of Transportation personnel perticipete actively with the United Nations Economic and Social Council's Committee on Experts on the Transport of Dangerous Goods, in developing international standards for identifying hezardous materials and communiceting their hazards.

The United States, in the past, sponsored a number of proposals, including recommended criteria for the classification of liquids presenting toxic risks in transport as a result of their volatility, and a proposal for standard world-wide requirements pertaining to documentation, marking, labeling, and placarding of dangerous goods in international commerce. The Department of Transportation participates with other international governmental "specialized" agencies, such as the Intergovernmental Maritime Consultative Organization, and the International Civil Aviation Organization, which primarily develop recommendations of an operational nature to insure safety transportation of the hazardous materials by the involved mode of transportation, and the International Atomic Energy Agency which develops international standards for transport of radioactive materials.

On the domestic front over the past year, we have seen improved lines of communication and cooperation between the MTB and both the Environmental Protection Agency (EPA) and the Nuclear Regulatory Commission (NRC).

A Memorandum of Understanding (MOU) between DOT and the NRC is expected to be signed next month to control overlapping responsibility on regulating the transportation of radioactive materials. It will basically continue the former MOU that the agencies now have over control and expertise of shipments of radioactive substances. The DOT will continue its jurisdiction over packaging of smaller quantities and transportation of all quantities of radioactive materials and the NRC will continue its jurisdiction over packaging and safety standards pertaining to fissile materials and other than small quantities of most other radioactive materials.

A MOU between the DOT and the EPA as to enforcement authority over hazardous substances and wastes is presently in the final stages of

development and is expected to be signed within the coming months. The Bureau is also working closely with the EPA in the promulgation of regulations on hazardous substances and hazerdous westes over which both egencies have jurisdiction.

BETTER INCIDENT DATA.

MTB's centralized reporting system is the Department of Transportation's primary source of hazardous materials "incident" deta. For reporting purposes, en incident is defined as any unintentional release of hazardous materials, ranging from a spill of e small quantity of peint, battery acid, or other less hazardous materials to major vehicular accidents involving hazardous materials release resulting in fire or explosion. It should be noted, es pointed out previously, that an increase in reported incidents may in large pert be ettributed to increased industry ewareness of DOT reporting requirements, as well as general increase in qusntity of hazerdous substance shipments. Thus, during 1978, carriers reported 18,022 incidents, e 19 percent increase over the 15,954 incidents reported in 1977.

There is no such thing as an "acceptable" degradation in safety; the ideal, of course, is a "zero" accidant experience. However, some risk of eccidents in hazardous materials transportetion is unavoidable. While there has been e progressive increase in hazardous materials eccidants end reported incidents over the years, reported deaths and injuries have been relatively stable in recent years. There was, unfortunately, a sharp increase in deaths and injuries during the winter of 1977-78 es a result of two major eccidents involving rail tank cars carrying compressed liquid geses.

ENFORCEMENT ACTIVITIES.

Enforcement activities of the Department are also a key to the promotion of safety through deterrence of noncompliance with the regulations. The application of legal sanctions in the area of hazardous materials transportation has recently significantly increased, particularly by the Federal Railroad Administration and the Materials Transportation Bureau.

In January 1977, the Bureau reissued the hazardous materials regulations under the authority of the HMTA, thereby providing civil penalty authority and increased criminal sanctions. During that same year, the regulations prescribing the Materials Transportation Bureau's enforcement procedures under section 110 of the HMTA became effective. In September, the Bureau started initiating civil penalty actions for violations by container manufacturers and shippers. As a result, 13 penalties totaling $17,850 were assessed and collected and 1 compliance order and 42 warning letters were issued.

The 1977 Congressional authorization and appropriation allowed us to add an additional three inspectors and secretary to the staff of four inspectors and one secretary during 1978.

Because of the greater emphasis on enforcement of MTB in 1978, 32 cases were initiated, 23 cases were completed with penalties collected totaling $45,050. In addition, 2 compliance orders were issued and 61 warning letters, an increase over the previous year.

Assessed penalties have ranged over the last two years from $200 to $9,000. Representative examples of the violations include a drum reconditioner's failure to properly retest and mark a non-DOT specification drum as a qualified container; a corrugated fiberboard box manufacturer's failure to construct a box in accordance with the DOT specification marked on it: a shipper's failure to properly describe a material on the

shipping paper, or to mark containers properly, or to use containers meeting the required DOT specifications; and a shipper's reuse of a non-reusable compressed gas cylinder.

In 1978, the Department of Transportation had 226.6 work-years available for the hazardous materials compliance enforcement program. Safety inspectors conducted a department-wide total of 26,190 inspections of facilities, 67,130 inspections of transport vehicles, and 5,154 accident investigations.

At present only the Federal Highway Administration has cooperative agreements, all of a voluntary nature, with State agencies in regard to enforcing the Federal hazardous materials regulations. However, as local and State authorities become more interested in regulating transportation of hazardous materials through their jurisdictions, the relationship between Federal and State regulatory agencies may create burdensome, even dangerous, inconsistencies which must be addressed in a systematic fashion.

In enacting section 112 of the Hazardous Materials Transportation Act, the Congress adopted the principle of Federal preemption in order to preclude a multiplicity of State and local regulations and the potential for varying, as well as conflicting, regulations in the area of hazardous materials transportation. The Materials Transportation Bureau has implemented regulations under 49 CFR Part 107 which provide for preemption by the Secretary of any requirements of a State or political subdivision which are not consistent with requirements promulgated under the Act. Further provisions are made for petitions to the Department by States or political subdivisions to continue in force any requirements which have been determined to be not consistent, provided that it can be shown such

requirements do not unduly burden commerce. In this manner, we have sstablished a mschanism for resolving or accommodating many of the differsnces that exist or are likely to arise between Federal and State or political subdivision requirements.

There ars four requests pending for administrative opinions docketsd under these procedures. The State or local requirements being considered involve highwey or rail transportation of LPG and/or LNG. The one completed administrative opinion involved a 1976 New York City ordinance which forbade the transportation of most radioactive materials within its boundaries.

In that instance, in April 1978, the Bureau issued, in response to a petition from a Long Island highway shipper, an administrative opinion concerning prsemption of the city ordinance under the Act. Although that opinion stated that the New York City code is not inconsistent with the rsquirements of the HMTA or regulations issued under it to date, the opinion does not preclude the possibility that other Federal statutes may, in fact, preempt the ordinance. The ruling recognized that there may be a need for prescribing routing requirements for highway carriage of radioactive materials. And in August 1978, the Bureau issued an Advance Notice of Proposed Rulemaking to solicit public comments to aid in the decision as to whether DOT should designate highway routing requiremsnts for radioactive materials.

Of course, State and local ordinances are prompted by concerns for the safety of their citizens. But it is also the Department of Transportation's responsibility, as mandated by the Congress, to ensure safety to life and property while not impeding the flow of hazardous matsrials in commerce.

TRAINING.

State adoption of Federal interstate hazardous materials regulations for application to intrastate traffic will continue to be encouraged in lieu of ad hoc requirements. Federal training assistence for State regulatory and emergency response personnel will continue to be supported in the future. Our safety program consists not only of regulation, inspection, and enforcement, but also education and training of those involved in shipping, handling, or carrying as well as regulating hazardous materials. Available training and related resources will concentrate on developing and preparing materials for delivery by regulated industries, educational institutions and other governmental bodies.

The Transportation Safety Institute, within the Program Bureau of RSPA, develops and provides indepth training for industry personnel, as well as Departmental inspectors, concerned with hazardous materials regulations compliance. The Materials Transportation Bureau and the operating administrations conduct additional training sessions and routinely participate in private industry sponsored training programs. Additionally, we maintain approximately 30 fact sheets and pamphlets on the handling of hazardous materials and in 1978 estimated distribution was 1 million items in response to over 8,000 requests.

EMERGENCY RESPONSE.

"Containment" regulations are not enough to prevent accidents and any resulting displacement of people. Department of Transportation personnel and the concerned transportation industry must devote more attention not only to training, but also to providing the technical information necessary to plan for and respond to hazardous materials transportation emergencies when they do occur.

Assistance of various types is generally required of, and often provided by, the shippers, nearby industries, and military organizations

in amelioration of spills. An ever increasing number of local jurisdictions are, as a part of cooperative community emergency response planning, attempting to provide for handling and containment of spills. However, availability of resources at the local level is a continuing problem and, additionally, there is a need for better guidelines to enable local action in developing such plans. In partial response to this need, during 1978, the Transportation Safety Institute held 23 emergency services workshops, attended by nearly 1,205 emergency services personnel and State training officials. In addition, the MTB is about to issue a revised and expanded 1979 edition of the Emergency Action Guide for Selected Hazardous Materials. The manual outlines the hazards of certain hazardous materials most frequently transported in bulk and contains technical information which will help emergency personnel during the first 30 minutes following a spill involving volatile, toxic, gaseous and/or flammable material shipped in bulk. General and specific safety procedures to follow are provided in spill guides arranged alphabetically by hazardous material. This manual has been revised and reprinted a number of times since its development in 1973 and over 800,000 copies have been distributed.

Section 109(d)(2) of the Hazardous Materials Transportation Act requires the Department of Transportation to establish and maintain a central reporting system and data center to provide law enforcement and fire fighting personnel with advice on meeting hazardous materials transportation emergencies. The Manufacturing Chemists Association's CHEMTREC system has provided a 24-hour centralized hazardous materials emergency response capability which generally had filled this need. However,

recent events heve made it evident that greater Federal government perticipation to supplement CHEMTREC wes desired and needed by State and locel governments, the public and industry.

TASK FORCE ON HAZARDOUS MATERIALS PROGRAM.

The Department's effectiveness in reguleting the transportetion of hazerdous materials was recently reviewed by e Department task force which made 6 recommendations endorsed by the Secretery. The first recommended esteblishment of e Stending Committee for coordinating DOT hazerdous materials transportetion programs. The Standing Committee, composed of key DOT officials, was esteblished and is chaired by me as RSPA's Administretor.

Another plan enunicated by the task force is to develop and esteblish e Netional Hazardous Materials Response Center by expanding the existing U.S. Coast Guard National Reeponse Center. This center would maintein e 24-hour response capebility to assist local enforcement authorities in combetting hazardous materials incidents.

The purpoee of the National Hazardous Materiels Rasponse Center would be to maintain e free communication network which could notify eppropriate Federel, Stete and local officials of a hazerdous material eccident, and through the use of existing industry mechanisms (i.e., CHEMTREC), provide immediate instructions on the technical ections needed to mitigete the effects of the incident.

The additional 4 recommendations endorsed by the Secretery are:

- Continue efforts to make EPA and DOT regulations as competible as practicable; continue accelerated regulatory efforts in the eree of liquefied energy gases, hazardous information number systems; and determine if performance

standards could be established in lieu of design standards.

- Analyze the civil and criminal penalty system in the Department to determine if penalties for violation of the hazardous materials regulations are logical and fair.
- Establish a centralized hazardous materials information system.
- Design a training program for part-time and voluntary emergency service personnel.

In addition as we reported last year, the Materials Transportation Bureau contracted with the National Fire Protection Association for the development of a comprehensive training course for emergency response personnel. The 20-hour course stresses tha importance of defining the roles and responsibilities of the various concerned response groups and places particular emphasis on communication and command considerations. In addition, the course presents a general overview of hazardous materials transportation, characteristics and classification of materials, sources of technical assistanca, and situation analysis and decision-making. Perhaps its most important feature is its guidalines for use by local fire departments and police departments in their development and implementation of their own community emergency response plans. Over 1,500 sats have now been distributed. A copy of the program has been offered to each State Governor at no cost.

MTB participatas in the Department of Transportation's work on an Interagency Task Force which is studying the question of an appropriate liability and compensation scheme for hazardous substances and other hazardous commodities. The DOT is joinad under the leadership of the Department of Justice, by the Environmental Protection Agency, the Department of Intarior, the Council on Environmental Quality, the Department of State and the National Oceanic and Atmospheric Administration. The

DOT has taken a very active role in urging that the study scope include not only designated hazardous substances but also all hazardous materials. An initial study result is expected within the next month.

I would like to conclude my remarks by commenting on the proposed hazardous materials authorizations bills, H.R. the Subcommittee's bill, and the Department of Transportation's request, H.R. both of which were introduced in the House on April of this year.

H.R. would amend section 115 of the Hazardous Materials Transportation Act to authorize the appropriation of $4,351,000 for fiscal year 1980, the amount projected in the President's budget request. We believe this amount is appropriate for the program as planned, based on a thorough review using the zero-based budgeting process of assessing objectives and impacts of various funding levels.

The Administration, as reflected in H.R. has requested authorization for such sums necessary to carry out responsibilities under the Act for 1981. If the Committee desires that specific annual amounts be authorized for each of these years, we believe the level should provide sufficient latitude to meet both foreseeable program needs and any unanticipated requirements which might arise based on events.

This completes my statement, Mr. Chairman. I will be happy to answer any questions the Subcommittee may have.

Mr. RUSSO. What time was that?

Mr. PALMER. That they arrived?

Mr. JAMES. Sometime in the afternoon, sir.

Mr. PALMER. That is not listed in the sequence of events.

Finally, later on in the afternoon, from the EPA, Mr. Bartlett, who is the on-the-scene Federal coordinator, arrived to coordinate the efforts of the Federal Government in that area.

At 12:25 p.m. a mobile unit was called, and offered assistance as required. At 12:35 p.m., they requested such assistance, and this was done. The Coast Guard dispatched a vehicle at 1400—I am sorry, I have the wrong one.

At 1445, IMC Chemicals, who had chemicals involved in the railroad spill, had been contacted together with Chemtrec, the Manufacturing Chemists Association response system, since they were the people who had the chemicals that were involved in the particular accident.

Mr. RUSSO. This was at 2:45 that they were contacted?

Mr. PALMER. I don't have when Chemtrec was contacted, but if it worked according to the way it should, Chemtrec would have been contacted at the same time that the National Response Center was contacted at 10:42 a.m. This is a remote area. Someone would have to either patch in through radio, or get to a telephone to make a call to the 800 number.

Mr. RUSSO. Have you been able to determine why it has taken from 8:10, when the accident took place, until 9:42 before the National Response Center was contacted?

Mr. PALMER. No, sir, I can only speculate that because of the rural area that it took that particular period of time to make the call.

Mr. RUSSO. Do you know what time the first Federal official was contacted?

Mr. PALMER. Yes; the first Federal contact was to the National Response Center at 9:42.

Mr. RUSSO. That was 1½ hours after the accident took place?

Mr. PALMER. Yes, sir. We, of course, are dependent on those at the scene to make the call in case of the accident. In any event, the National Response Center calls continued through Sunday, and then, of course, all through April 8 and then through April 9. These records are certainly available to you, if you would like to review them.

Mr. FLORIO. I would ask Mr. James if he has anything to add, particularly with regard to the incident over the weekend, as to what happened there.

Mr. JAMES. Yes, sir, like Mr. King's, our inspectors have also not been able to inspect the site very closely. I anticipate that they will be able to do a close inspection sometime today. Therefore, we are still uncertain as to the cause of the accident.

We did have several people in the area at the time of the accident who were able to arrive at the scene the same day. I would like to point out that the Federal officials who work for Mr. King and work for the FRA, in no way take charge of the local situation. They are there to inspect and investigate the cause of the accident.

Mr. FLORIO. That is a very significant point. To your understanding, who does take charge of coordinating at this particular type of site?

Mr. JAMES. It is a combination of local officials and railroad officials.

Mr. FLORIO. As you see it, the Federal Government, has no responsibility to coordinate what is going on. We know that your responsibility is to investigate, and hope that you will take the responsibility to ascertain what happened. But in terms of an immediate response to the present crisis, it is your understanding that there is no Federal responsibility to coordinate?

Mr. JAMES. That is correct, with the possible exception of the EPA, within their area of concern.

Mr. FLORIO. That depends on whether or not you have certain things happening. For example, if there is a water system that is being polluted, EPA comes into play.

Mr. JAMES. That is correct, sir. I wanted to clarify that for the committee, because I think you may have been operating under a misimpression.

Mr. FLORIO. I don't know whether we are operating under a misimpression. I think that it once again highlights the feeling, which seems to be coming from the members of the committee, that there is a responsibility on the part of MTB to, in fact, provide the wherewithal which enables greater and more effective local responses. It also shows that the immediate coordination will take place at the local level by State and local officials, and if they don't know what they are doing, we have the potential to create even bigger problems.

Therefore, if, in fact, one of the prime responsibilities of the agency is to insure programs for the training of individuals and to provide for some degree of coordination through the utilization of local people, then that is very important that we know whether or not it is being done. It is also very important that we know what has to be done to improve the performance of the agency, if improvement is needed.

If you gentlemen have concluded with your remarks, I would, in that vein, ask if there is any particular response to the recent criticisms made of the program and the agency by GAO and, of course, by the National Transportation Safety Board; and if you regard those criticisms as legitimate.

What is being done to correct the areas of deficiency, Mr. Palmer?

Mr. PALMER. Well, first of all, Mr. Chairman, any criticism is taken quite seriously. We are very conscientious in attempting to fulfill our responsibilities under the law.

With regard to the NTSB recommendations, we deal with these individually. We respond directly to the NTSB with our analysis of any recommendations that come forward. Generally we are responsive with regard to these in the form of rulemaking, or modifications thereof. Some of them are longer term, or they have a longer leadtime, or a longer priority. For example, in the area of risk analysis methodologies, we have agreed with them to look into that, and are doing so.

Where they have a class I urgent action requirement such as the retrofit for shelf-couplers, to which we, in fact, responded within 30 days, together with FRA, and required the speedup of the retrofit of shelf-couplers and heat shields on the 114 tank cars.

I think we are responsive to the recommendations of NTSB. Our staff works directly with their staff to determine exactly their intent relative to a recommendation in order to respond to it in a positive manner. We have several categories, depending on the priority of the particular recommendations.

So I think that if you look, you will find that we have responded to their recommendations as they have come out.

Mr. FLORIO. Mr. Madigan?

Mr. MADIGAN. Mr. James, I am looking at a chart before 1977, which lists railroads by name. It lists in the next column the number of derailments each of those railroads had. Then in the third column are listed the derailment rate per billion gross ton miles. Are you familiar with this chart?

Mr. JAMES. Yes, I am.

Mr. MADIGAN. It seems that the total number of derailments pertaining to the railroads before 1977 is somewhere in the neighborhood of 4,000. Does that seem like a reasonable number, a reasonably accurate number?

Mr. JAMES. Approximately 4,000 that were due to track defects.

Mr. MADIGAN. 4,000 that were due to track defects. It looks like the best railroad was the Florida East Coast with only four derailments. The worst was ConRail with 591.

Mr. JAMES. In absolute numbers, yes, sir.

Mr. MADIGAN. I understand that two railroads in Canada operating on this great per billion miles, they only have about 20 percent the derailments we have in the United States. Is that correct?

Mr. JAMES. I am not familiar with the exact figure, but I know they have far fewer derailments.

Mr. MADIGAN. There seems to be a relationship between the amount of money being put back into these railroads and the derailments. I am a little bit at a loss to understand why this situation continues to go on year after year, and get incrementally worse each year.

I am somewhat familiar with the operation of some railroads and admittedly know nothing at all about the operation of many other railroads. But I have observed, through the years, that some railroads have been taking money out of the operation of the railroads, and buying candy companies, motor home manufacturing companies, soft drink distributing companies, making real estate investments, doing things like that, and some of the railroads that have been doing those kinds of things are the railroads that have the highest number of derailments, except ConRail, and the greatest number of derailments per billion ton gross miles.

Thus, I have to conclude that those railroads are not taking care of their railroad operation. I have to conclude also, until you disabuse me of this notion, that the Federal Railroad Administration is sitting back letting railroads take money out of the railroad operations to invest in other kinds of things, letting the track condition get worse, letting the risk for the public at large get worse, and you are not doing anything about that.

Mr. JAMES. I think a lot of the things you have said are true, Mr. Madigan, although some of the combinations might be less than accurate. It is true that the railroad system continues to deteriorate in the United States. It is true that there is disinvestment among many railroads. The magnitude of the deficiency of adequate funds to maintain the system is enormous.

A report that DOT issued recently estimates that the capital shortfall over the period 1976 to 1985 is in the neighborhood of $16 billion. There is an enormous deficiency in the system, an enormous amount of deferred maintenance. The income continues to drop. The rate of return is extremely low. There is a very serious financial problem in maintaining this overlarge system.

It is true that there has been some disinvestment. There has been some investment in real estate and other companies. Some of that money has come back into the railroads. Some of the most marginal railroads have been living off these other investments.

The IGC has been living off these other investments. The Milwaukee continues operating because it has a land company with assets. So it is a two-way street. There is disinvestment, but there is a much bigger problem, and that is the lack of adequate income for many, many decades in the railroad system.

Mr. MADIGAN. But if the FRA were to say:

We are just not going to let you operate over those bad tracks anymore. You have let these tracks get worse. You have let the tank cars get bigger and heavier. Do you think that the answer to that is just to operate them slower, so that when they fall off the tracks, nobody will get hurt too bad. But we are not going to let you do that any more. We are going to go out and set a standard here. If you don't conform to that standard, we are going to say that you cannot operate.

What do you think the railroads would do, Mr. James?

Mr. JAMES. I think in a way we do that. Our track standards are graded. There are various classes related to speeds. But if a railroad cannot meet the lowest class, it cannot legally operate that line.

Mr. MADIGAN. There is an alderman in my hometown who has a railroad track that runs across the back of his yard. He called me last night, and I am going with one of your people and with an official from the railroad, and with the emergency disaster coordinator for the State of Illinois, and the alderman tomorrow, because we are going to look at a track that the FRA has said is adequate for operations up to 40 miles per hour, which he pushed over with his foot last night.

What do you think about that, Mr. James?

Mr. JAMES. I am not familiar with the specific situation, but I think if he is in error, he is in error. I just don't know the facts of the situation. I understand it was a State of Illinois inspector who was involved. But as the chairman indicated before, there is sometimes an area of disagreement as to whether the track is fit for 10 miles an hour or 40 miles an hour.

There may be one defect that is overlooked in this segment of track, and that might be the place where he pushed his foot. Maybe, indeed, that track is not even class I.

Mr. FLORIO. Would the gentleman yield?

Doesn't that cry out for the need to reexamine the standards that are being used?

Mr. JAMES. We certainly have been examining the standards. We have held hearings already. But most standards are in quantitative form, where there is absolutely no disagreement. Something is either 52 inches or it is not.

There are some areas, particularly related to the condition of the wooden ties where some judgment is involved.

Mr. FLORIO. There is also a question of interpretation. I don't know the exact number, but out of 20 ties, 4 or 5 can be defective, admittedly defective. The difficulty arises if the ties are spaced every third or fourth line. That is one situation. A totally different situation occurs with regard to impact if there are four defective ties in a row.

Contrary to one of the previous witnesses, I am convinced that there is a high degree of subjective decisionmaking authority that is inherent in implementing what is to be objective standards. This can result in having two good-faith evaluations of safety that come to two different conclusions with regard to the speed that should be traveled over a particular track.

Mr. JAMES. Yes, sir. During our recent hearings on the track standards, our biggest bone of contention from the industry was with respect to the condition of the ties. There is definitely a difference of opinion as to what a tie defect is.

The industry standards seem to be more relaxed than the FRA standard.

Mr. FLORIO. Isn't it just common economic sense to know that the railroad is going to want to go as fast as it can under its interpretation of what is safe, and that the interpretation may not be the same as, and, in fact, not often the same as that of the Federal inspectors'.

Certainly the motivation on the part of the railroad is to go as fast as possible in order to facilitate the more rapid movement of traffic.

Mr. JAMES. Certainly, railroads have scheduled tie programs, and there are incentives to interpret the conditions of the ties in accordance with the scheduled tie replacement program.

Mr. FLORIO. Thank you.

Mr. MADIGAN. It is possible, Mr. James, that you are waiting for the Congress to write a statute that establishes what the standards might be? Are you waiting for us to do it?

Mr. JAMES. No. I think we do have standards, and we are in the process of revising those standards. They will be better. They still will not be perfect.

Mr. MADIGAN. How can you explain to me the difference between safety operations in Canada and the United States?

Mr. JAMES. You have two railroads in Canada. Their financial condition is far different from that of the railroads in this country. The degree to which deferred maintenance exists in the two countries is substantially different.

They have got an enormous system in this country to handle twice as much of the traffic four decades ago than it does now. The system is about the same size. We just have two different situations.

Mr. MADIGAN. Your agency does have the authority. You could have inspected this route where this train derailed on Sunday, and you could have shut it down. You have that authority, don't you?

Mr. JAMES. We have authority under our emergency powers to prohibit the use of a facility, or piece of equipment as long as that piece of equipment or facility creates an imminent hazard of injury to the public.

Mr. MADIGAN. Does that make the answer to my question yes?

Mr. JAMES. If we find that the line is an imminent hazard, and the railroad fails to correct it, we can close down that line. Yes, sir, we have done that.

Mr. MADIGAN. Thank you. I have no other questions.

Mr. FLORIO. Mr. Russo.

Mr. RUSSO. Thank you very much, Mr. Chairman.

Mr. James, I have a few questions about decisions that are being made in FRA concerning the types of materials that are put into these tank cars. Do you regulate the type of materials that are put into these tank cars; do they have to seek your permission in order to carry that chemical?

Mr. JAMES. No, we don't, Mr. Russo.

Mr. RUSSO. Does anyone have enforcement authority as to what goes into the tank cars?

Mr. JAMES. To a certain extent, the MTB regulates the labeling, packaging, and characteristics of the car carrying the chemical.

Mr. RUSSO. Do the railroads have any responsibility to notify any particular Federal agency as to what it is carrying, if it is properly carrying that chemical?

Mr. JAMES. No, as far as I know there is no particular obligation.

Mr. RUSSO. My concern is, and Mr. King said several things that were on that train, as they stand by themselves, are the problem. But should there be an accident, should there be a fire, things happen. Certain process gases are released, et cetera. Is that taken into consideration at all by any Federal agency, the potential problem?

If there is an accident, what happens to that chemical——

Mr. JAMES. I assume you are asking whether there are standards with respect to which chemicals can be placed next to which chemicals, and there are no standards at present.

Mr. RUSSO. Do you think there ought to be standards?

Mr. JAMES. I have to take a look at the full range of possibilities, how many things do you prohibit from being next to one another, and see what is involved. In some cases, the reverse works. Sometimes it is good to have certain things next to other things.

For example, it was good to have the acetone next to the chlorine because burning acetone is just the thing to make the chlorine harmless. It works both ways.

Mr. RUSSO. I understand that, but those people who are charged with moving this particular chemical don't understand the problems they face. For example, they took 1½ hours to get the information to the National Response Center. Am I correct?

Mr. JAMES. Apparently, if you have adjusted for any time change.

Mr. RUSSO. At that time, they did not know what was on that train. It is difficult to tell them because nobody really knows what

is on that train. Is there a possibility of requiring the train, or somewhere down the line, to have a flight plan, such as they have in the airlines, "This is what we are carrying. This is how many cars are carrying it." So if an accident takes place, and a call goes into the National Response Center, they know what kind of chemicals they are dealing with. They are not going to have to wait an hour or a half-hour before they find out.

Mr. JAMES. There is a requirement that a way bill be carried in the front and rear of the train indicating the material carried in each car in the consist.

Mr. RUSSO. But if the train blows up, and you can't get to the train, it does not do anybody any good. You can't get to the information.

Mr. JAMES. It seems to me that the fire department did absolutely the right thing by approaching and withdrawing and seeking guidance.

We feel that in some cases the fire department has taken it upon itself to try to extinguish fires, or take action with respect to the hazardous materials, which did not prove to be the correct approach.

Mr. FLORIO. Would the gentleman yield?

Mr. RUSSO. Yes.

Mr. FLORIO. On that point, of course, the fire department did it, I suppose, almost by accident. In fact, it may well be the wisest course of conduct, but in other instances it might not be. That is the thing that the committee is very concerned about, the lack of a coordinated, intelligent approach on the scene. It appears that we really don't know what we are doing.

I just wonder if any consideration has been given to the Canadian system which apparently involves forms that are prepared by the shipper and supplied to the railroad, which are then carried on the train. These forms provide the contents, identify classifications of materials, and also contain simplified instructions as to how to deal with the different chemicals in the event of an accident.

Has there been any exploration by your agency into the feasibility of the Canadian system being adopted here in some way?

Mr. SANTMAN. In various forms, yes. A number of the projects that we have underway involve the location of more information. It is a matter of trying to put it in a digestible, quick, index form.

I think the Canadian system you are referring to involves utilizing basically the same pieces of information that we have in this country in condensed form on particular chemicals. There are various ways that that can be distributed. One way, of course, is to have the shipper put it on the train with the product.

Other techniques involve having the personnel, who are going to be in the emergency response situation, introduced to them ahead of time, to have them have copies, and have ways for them to index into them without having to rely directly on the personnel of the train.

We are exploring a number of ways of getting a lot of information about a wide range of chemicals into a form that is usable, and is in the hands of the people who are on the front line, and dealing with these emergency situations.

Mr. FLORIO. Would the gentleman yield for one more observation.

How long has your organization been in existence?

Mr. PALMER. The Materials Transportation Bureau dates from 1975, and was organized in response to the Hazardous Materials Transportation Act of 1974.

Mr. FLORIO. Your very comprehensive statement goes into all of the various studies, and all of the different agencies you are dealing with in this reorganization.

I get the distinct impression that there is an awful lot of overlapping and lack of coordination. If your agency is supposed to be the coordinating agency between the different other agencies that you have memoranda of understanding with, NRC, EPA. This is a very confusing area, and if we look to your agency for coordination, and your agency in and of itself is confusing, that does not give us very much confidence in what is taking place.

The response that you are exploring, this or that study, how much longer is it going to be before we can look to your agency to give us the leadership we need to have such things as a system on a train that provides some simplified instructions as to how to deal with some of these materials.

It seems to me that there should have been something to start with. There should have been something that your agency had worked on immediately. That is clearly perceived to be the major problem; no one knows what to do.

If the fire department happens to back off, that is fine. However, they sometimes don't happen to back off. Their knowing how to treat some of these materials on the scene would provide for a much more expeditious, and hopefully a safe handling of one of these problems. But the local people cannot know how to handle the materials if they don't know with what they are dealing.

Should that be the first step, to provide to the local people information on what they are dealing with, and how they should deal with it in the safest way possible?

Mr. PALMER. Mr. Chairman, you make a very complex statement. If I might try to sift through it.

The complexity within MTB that you note really was an attempt, and I thinks it succeeds in doing this, in separating regulation from enforcement. This has been done, so that we have our operations people doing operations, and enforcement people doing enforcement. This means that anyone looking in from the outside, trying to locate the appropriate person has a quicker track to that particular individual.

So I think that if the MTB's internal relationship is complex, it is really in response to needs that arise for a particular function. These are functional organizations. So it has that kind of character. MTB has been in its present form since 1975.

I think you also know that each of the administrations, growing out of their prior separateness, had their own hazardous materials programs before the Department of Transportation even had a safety type of program. The old Railway Safety Office at ICC was in existence prior to the bringing together of all of the hazardous material program within DOT.

The Secretary's office in 1975 essentially drew together all the programs that were scattered throughout the Department of Transportation, and made one of the judgments, and that was to assign

to the modal administrations the management of safety for that transportation mode.

So while MTB has an overall responsibility in the area of packagings and developing rulemaking, the particular safety requirements that are modally specific are vested in the mode by direction of the Secretary. Again, that is provided so that those persons who are interested in rail, they know that they can go through the Federal Railroad Administration and obtain a quick referral to the safety office.

So the intent was to do that.

Mr. FLORIO. If, in fact, you are charged with the formulation and publication of appropriate regulations, and FRA was charged with enforcement, doesn't the increase in accidents or derailments, indicate that some things, maybe the cooridnation is not going right? Either your regulations are inappropriate, or else the enforcement is not taking place.

Mr. PALMER. Quite clearly, the deteriorating condition of the rail industry is involved.

At the Federal Rail Safety Office, we have seen the appointment of a Director, which is the first step in getting the program going in a consistent direction. The Railroad Administration under the direction of Mr. Sullivan, has given them guidance to review what is going on and particularly to look at the track standards, and develop new standards because the old ones are clearly not working.

We work with them, and that is one of the reasons for the establishment of the Standing Committee, to look at an overview posture. I think we have seen, not just developing studies, but actual rules that have been written, that have been expedited; areas of concern that have been put directly to the various modal administrations, ranging from a situation like the changing of a teaching requirement within the FRA to conform with our safety standards, to reduction allowed for the retrofit of the DOT specfication 112 and 114 tank cars.

So I think that it is not a question of developing studies so much as it is organizing and understanding what we are about to try, and bringing about safety. Also we are obligated to examine the economic impact of our actions.

Mr. FLORIO. Are you telling us that your regulatory process with regard to safety is, in fact, guided by the economic considerations of those safety requirements which would adversely affect yield or return on profit?

Mr. PALMER. No, I said they were subject to review for the economic impact. That is correct. That is true of all regulations.

Mr. FLORIO. We are not sure what that means. Could you give us a bit of amplification?

Mr. PALMER. For example, in the case of routing for liquified natural gas trucks coming out of Boston, we have been studying the possibility of a proposed rulemaking. Part of that involves developing an economic impact study of the added cost to this particular industry of a regulation that would do any number of alternative things, right up to the routing of that particular trucking.

We have taken that study and have looked at it. Our judgment in this case is that there is continuing need to go ahead and develop a safety regulation, but as part of this process we are obligated to look at the economic impact. I did not say that it was a driving force.

Mr. FLORIO. I will pursue this more on my own time. Thank you.

Mr. Russo?

Mr. Russo. It seems to me that one of the problems we have, we have these studies, we have these standing committees to oversee everything. All I know is that the real ones are going up every year. Something is not being done. Somehow we are not implementing the things that ought to be done as far as safety is concerned. I don't think that it is creating more bureaus or agencies, I think that it is more action that we need.

Let me just ask you this, Mr. James. Does FRA have any known program where they make dollars available to railroads for upgrading of tracks?

Mr. JAMES. Yes. We have a loan and a guarantee program.

Mr. RUSSO. How is the implementation of that program?

Mr. JAMES. Apparently we are spending the money that has been appropriated.

Mr. RUSSO. I beg to differ with you. I don't think you have been. Maybe this year you may be starting to, but I think last year you got $220 million appropriated, and I think you had only spent $20 million at the time we had our last hearing. I am just wondering if the program is getting any better.

Mr. JAMES. I think that the title V preferences share program for track rehabilitation is doing well. The guarantee program is a little slower. There is apparently less demand for the guarantee.

Mr. RUSSO. I was interested in what Mr. Madigan said if the FRA would just tell the railroads that they cannot operate on that track unless they upgrade their tracks we will help them by either giving them a loan or a guaranteed program. But what would happen.

Mr. JAMES. We have done that.

Mr. RUSSO. What happened?

Mr. JAMES. In one case, in New Jersey, the railroad got State funding to upgrade the line. It was a branch line. In another case in New York State, ConRail, I believe, indirectly using Federal funds, upgraded the line. In another case in New Jersey, again ConRail used Federal funds indirectly for upgrading.

Mr. RUSSO. Do you ever consider saying that to the L. & N.?

Mr. JAMES. We have done something much more extreme with regard to the L. & N., we have imposed restrictions on 10,000 miles of track. We have been in litigation for 2 months solid with them.

Mr. RUSSO. Where you put the restriction, I believe, was a 30-mile an hour portion of track?

Mr. JAMES. Using emergency power, we put a 30-mile speed limit on the entire system.

Mr. RUSSO. When you do that, do you go out and investigate the track to determine that it cannot go that much higher?

Mr. JAMES. No, the L. & N. had problems endemic to their whole system. We used our emergency powers, not with respect to a particular piece of track or equipment, but with respect to the entire railroad. We also required the L. & N. to make a walking

inspection of their entire 10,000 mile system by foot, and to correct all defects that were found.

Mr. RUSSO. Then you go back and do the check yourself by walking?

Mr. JAMES. We have taken on a rather enormous burden on our resources to go right behind them checking, using our geometry cars, and also checking on foot.

Mr. RUSSO. Was this section of track checked because I understood just prior to this action, you rescinded your original action of 30 miles an hour. Is that correct?

Mr. JAMES. Yes, the L. & N. has been requesting the order to be lifted segment by segment, as they have walked the track, and allegedly made corrections of any defects.

Mr. RUSSO. Was this section of track supposedly corrected?

Mr. JAMES. This had been walked, and on March 1, the L. & N. requested that the order be lifted.

Mr. RUSSO. Who did the walking first?

Mr. JAMES. L. & N. did the walking.

Mr. RUSSO. They told you: "We repaired the track."

Mr. JAMES. Yes, they told us that they repaired the track, and it was OK. We went behind them, one Federal and one State inspector for about a 2-week period, and checked the whole length of that line last month.

Mr. RUSSO. What was the determination?

Mr. JAMES. We found additional problems, but nothing significant. But we did find some problems, and we told them to correct those as well. We told them to correct the problems we found on our reinspection. They have indicated that they did correct those problems.

Mr. RUSSO. Did you double check and see if that they did everything that you had asked them to do?

Mr. JAMES. We did some spotchecking. We did not go over the 200 miles again.

Mr. RUSSO. You did not have the personnel to do that?

Mr. JAMES. It is a drain on our personnel to conduct this operation, but we think it is necessary.

Mr. RUSSO. We don't know at this point whether or not the derailment was caused as a result of track; right?

Mr. JAMES. We don't know the reason for the derailment, no.

Mr. RUSSO. What I am concerned about, I have an article here that shows the derailment problems on this particular line. It seems to me it would pose terrible problems on the L. & N. If they, FRA, were getting tougher with them, they would do better than they are doing.

Mr. JAMES. That is very right, sir. That line was in very bad shape 2 or 3 years ago.

Mr. RUSSO. Thirty miles an hour for a 100-ton car is still a lot of speed?

Mr. JAMES. You get to a problem if you go much lower. You have other problems with train actions between 15 to 25 miles an hour. That is a very dangerous speed, generally, because of rock and roll problems with the cars.

Mr. RUSSO. Then 30 miles an hour is the lesser of 2 evils. If you go up, you have other problems because the track is not good

enough to go fast enough to keep the motion good, and if you go too slow, it can be tipped over.

Mr. JAMES. A number of cases show the chances of losing hazardous materials is much greater over 30 miles an hour than below.

Mr. RUSSO. Did you ever consider reducing the tonnage per car on its allowable. I understand there are more than 20 or 30 tons per carload, others average 100 tons per carload. Do you think that this is any reason why our track keeps getting ripped up?

Mr. JAMES. Yes, absolutely.

Mr. RUSSO. Can we do anything about it?

Mr. JAMES. It becomes a very substantial economic question.

Mr. RUSSO. My personal feeling is that if we allow the railroad to continue the way we are doing, what is going to happen is that you will have a national rail system, and the Federal taxpayers are going to inherit the lousiest system in the world.

We got Amtrak dumped on our back, the lousiest track and we are still trying to repair it. Unless we get tougher with these railroads and get them to spend the dollars on this maintenance, we are going to get it—we are going to have people come here, and we are going to have a national ConRail system that the Federal taxpayers will have to subsidize. We will have to get better track.

You don't have an easy job.

Mr. FLORIO. Mr. Lee?

Mr. LEE. Dr. Palmer, if we were shipping radioactive waste by railroad from point A to point B, what kind of cooperation and communication would take place between FRA and DOT, the Nuclear Regulatory Commission, the State officials, the local officials, et cetera?

Mr. PALMER. Let me respond just in general, and then ask Mr. Santman to give you the details.

First of all, the answer depends on a number of things, for instance the level of radioactivity, the quantity that is being shipped, the general class of material. Radioactive materials are generally regulated solely by the Nuclear Regulatory Commission. That is, they reserve onto themselves the right to write rules for how the radioactive material is handled.

We have a memorandum of understanding with them which details our particular responsibilities under that arrangement.

Mr. Santman has been an active participant in the Department's relationship with the NRC and has been involved in the latest Presidential Commission to look into the handling of radioactive waste. If I might ask him to give some details about that.

Mr. SANTMAN. Sir, spent fuel movements are spread between railroad and highway. By weight, anywhere from 75 to 90 percent by rail, since rail has the ability to carry larger loads. The principle weight of load is in the cask itself.

So there are the high level nuclear materials, principally nuclear wastes, that are being moved by those two modes of transportation, weighted heavily in the direction of rail. At the present time, approximately 15 to 20 casks a year are moving by rail. There are substantial questions about the future of nuclear power, and the amount of nuclear material that will be needed to be moved both in the form of new fuel and in spent fuel from those facilities.

The real questions are associated with the permanent repository system, where they would be located and the transportation questions following behind that. In the area of high level materials transportation today, we and the Nuclear Regulatory Commission share the development of standards. We concentrate on the development of standards dealing with low level materials. We are involved quite a bit in packaging of these radioactive materials, particularly the small packages that go in and out of boxcars, or in and out of trucks.

The Nuclear Regulatory Commission deals very comprehensively with the high level activities. They license powerplants. They license facilities that are dealing with high levels radioactive materials. As part of that process, they develop the basic performance standards for the containment systems for high level materials.

The casks that we are talking about are designed by cask manufacturers, by potential shippers and by users. The design of that cask matches up with the performance standards developed by the Nuclear Regulatory Commission and then the particular design is licensed by the Nuclear Regulatory Commission.

We require, in our regulations, that the cask which is introduced into the transportation system, be of the type that is approved by the Nuclear Regulatory Commission.

Mr. LEE. I guess, there is no special notification to the State or local official, or coordination or cooperation in the other Federal agencies in the routing that that train may take to insure that we don't have any of the deficiencies that Congressman Madigan's backyard seem to have.

What kind of precautions would you take?

Mr. SANTMAN. You have a split between highway and rail. Your options for highway are obviously greater for getting from point A to point B. Your options in rail are fairly limited to what track you have available.

For example, if you are coming back to the Portsmouth Naval Station with the spent fuel from the submarine base, there is a very limited way you can get out of there. Your choice is probably to take one rail shipment or multiple highway shipments. The choice in the past has been the rail shipment, and there is basically one route that you take out of there to get to South Carolina, or a route to the State of Washington.

So your opportunities to route rail shipments around populated areas are quite limited. I know that our companions in the Federal Railroad Administration are examining questions such as the options of routing, not just of radioactive materials, but of hazardous materials generally. This is an area in which the National Transportation Safety Board has raised questions, and that the Federal Railroad Administration is examining.

The rail options are very limited, and the choice is, therefore, limited.

In the highway arena, the matter of controlling the flow of highway traffic has been traditionally, and I think correctly so, a matter of control by the States and localities as a part of their police power activities. We are encountering, of course, a number of communities, and in some cases States, that are voicing concern

about having particular materials traveling to routes that either go through their community or that go on a particular road.

Here again, we and the Federal Highway Administration are involved in an indepth effort to put some rationality into the answer, and into the available information as to the choices of routing, not just the radioactive materials but with some of the other materials that are high on the list of incident problems.

Mr. LEE. In summary, gentlemen, are you saying that for radioactive waste that you have a better system than we do with the kinds of problems that we were talking about here this morning?

Mr. SANTMAN. I am sorry, Mr. Lee, I did not understand your question.

Mr. LEE. In summary, are you gentlemen suggesting that for the potential shipment of radioactive materials by railroads, that we have a better system for coordination, communication and cooperation than we do for the toxic chemical products that are shipped?

Mr. SANTMAN. I would say we do, and there are other factors. Your cask for radioactive material is a pretty sturdy cask. It has been taken through tests by the FRA and the Energy Department has conducted crash tests. It is designed with a high degree of crash survivability in it.

These railroad tank cars that we are talking about are not designed that way. Propane cars are not designed to sustain 80-mile an hour crashes. So you have that factor. Second, with strategic nuclear materials there is a very detailed national plan for tracking them and keeping them in custody throughout their route.

Third, the number of shipments of high level radioactive materials is at the present time very limited. All of those things add up to a less risky segment of the hazardous materials transportation field.

Mr. LEE. Thank you, Mr. Chairman.

Mr. FLORIO. I am confused on the last point that you are making. First of all, what did your agency have to do with the formulation of the cask or container standards? Was the formulations through a regulatory process that you participated in, or you initiated, or was it NRC that did that?

Mr. SANTMAN. NRC handles the high level containment standards. We basically handle the low level standards—the packages for radioactive pharmaceuticals, for example, are our part of the responsibility.

Mr. FLORIO. In terms of the nuclear facilities with which we are concerned, is it true that you don't have much to do with the transportation of those materials out of those facilities relative to the containers that they are shipped in, that is NRC that is doing that.

Mr. SANTMAN. That is correct. We incorporate by reference, and accept NRC's blessings of those.

Mr. FLORIO. You accept that.

Mr. SANTMAN. Yes.

Mr. FLORIO. What I am interested in, first of all, is your comment that we have traditionally left the regulation of traffic to the localities and the States. This is true, except when we are talking about interstate commerce. When you were, talking about hauling

nuclear wastes and spent rods, you were, almost by definition, talking about interstate commerce because there are only so many locations that we can take these materials to, and that entails traveling over State boundaries.

Other than that, it is my understanding that we are charged with the responsibility of formulating a regulatory system, or a scheme for monitoring and regulating the interstate traffic of nuclear wastes and nuclear spent rods. Is my understanding correct?

Mr. SANTMAN. That is correct, sir.

Mr. FLORIO. It is also my understanding that you have not yet done this and as a result, a problem which is very visible in places like New York City, has developed where local ordinances are being put forth, saying that you cannot transport through the community.

Now, it is not inconceivable to me that, particularly on the basis of the Harrisburg incident, those types of ordinances would be initiated by local officials with a legitimate concern about the safety of their communities.

Doesn't this indicate the need to move forward as rapidly as possible with a rulemaking scheme that will provide for the orderly transportation of these materials?

Mr. SANTMAN. I would deal with it in two parts, sir. First of all, there are existing standards governing the interstate transportation of these materials and those standards are also applied to intrastate transportation in a couple of arenas.

These standards deal with the containment, the identification of the material how it is to be packaged, the limit of how much you can put in the packaging. There are limitations on the amount of radiation permitted in a particular package, how much of it you can put in one transportation vehicle.

These regulations are in place. They do govern all interstate loadings, carriaging and packaging of radioactive materials.

Mr. FLORIO. Of course, they have nothing whatsoever to do with allocations regarding to railroads or truck routes. Is that correct?

Mr. SANTMAN. They do not deal with the route you take to get from point A to point B, nor do they deal with such things as how fast you may drive, or whether you may drive on wet roads. These, sir, are the areas of traffic flow control that I have made reference to that have traditionally been the subject of local regulation.

Mr. FLORIO. Do you think it is desirable that there be a national situation? Conceivably, every municipality around Harrisburg could pass ordinances saying, "Nothing passes through our town," in which case you would not be able to dispose of material.

Mr. SANTMAN. This is precisely the question we are examining in rulemaking. We are in the final stages of the advance notice of proposed rulemaking, the examination of the question of whether or not there should be Federal standards governing the highway routing of radioactive materials.

Mr. FLORIO. You are going through deliberations to ascertain whether or not there should be standards? I mean, this seems fairly preliminary to me in terms of ultimately having standards. What would dictate not having Federal standards on the interstate transportation of nuclear wastes?

Mr. SANTMAN. We must consider the current situation. There are a number of localities with transportation restrictions. You used the New York City locality as an example. The underlying arguments for the New York City ordinance all come down to: "We don't want any of that stuff in our community."

Mr. FLORIO. Is that going to happen everywhere, and is it appropriate that some Federal agency dictate what the reasons are for not having these things? I cannot conceive of this happening. The population density being what it is, that might be a legitimate concern for exemptions from or exceptions to a national system, but I can see chaos occurring if, in fact, every municipality is left to its own discretion as to whether or not it desires to have these materials go through.

Mr. SANTMAN. That is quite true, and that is why we are into this rulemaking. There are a number of things that we need to look at, for instance, which radioactive materials, which range from radium dial watches to plutonium, we want to address. We are dealing with materials such as radioactive pharmaceuticals, industrial radioactive isotopes and high level wastes.

We are dealing with questions relating to the likelihood of a release and the chance that there will be a release statistically in the transportation mode. You are dealing also with another arena, with what the risks are if you do have a release, and obviously the level of risk would vary from the small quantity packages to the high level items.

Mr. FLORIO. Do we foresee pending regulations being preliminarily published?

Mr. RUSSO. Would the gentleman yield?

Mr. FLORIO. I will be happy to yield.

Mr. RUSSO. The Department has been looking at several sites to store your high level harzardous wastes. You looked at four areas. Are you acquainted with that?

Mr. SANTMAN. I am familiar with the WIPP Project in New Mexico. Beyond that, I would hate to speculate on sites that they have in mind.

Mr. RUSSO. They have come down with one site that is going to be in Morris, Ill., where they have a lot of those kinds of wastes. Obviously, if we are generating hazardous wastes somewhere in New York, and you want to get it to Morris, Ill., you have a lot of area you have to travel through to do that.

I personally would like to see more than just one area. I don't know how you feel about it. You probably don't have much impact on what DOE does, and they need more money to set this up. But I would like to see more than one waste site and gas displacement can cut down. But right now they are going to take it to Morris, Ill., which is 90 miles from Chicago.

Mr. SANTMAN. Two points that I would make, Mr. Russo. First of all, the Department of Transportation participated in the interagency review on nuclear waste policy development, and we, from the transportation perspective, have beat the drum consistently so that in looking at candidate sites wherever they may be, the persons who look at those candidate sites and develop the environmental impact statement and the basic decisionmaking documents, include a full description of the facilities that will be served and

what the transportation connections are. Given the fact that rail is the preferred choice from the economic perspective, the availability of that should be considered initially and not left out of the picture while we are considering whether it is going to go to Morris, Ill. or some other place.

The second point that I would observe, and this really has to do with the State of Illinois. Their ability in the State of Illinois to deal with hazardous materials movements and emergencies is probably as sophisticated as any State in the country. They have been quite in the lead in terms of recognizing where they can utilize available Federal funds for work in program development, and obtaining some of the course materials and the training that we have offered.

Mr. RUSSO. I just hope that they do not take the hazardous materials over to Madigan's Alderman's track. That would make me a little nervous. In Illinois, we are pretty sophisticated in how we move nuclear wastes, but if DOE decides that this is the one place that we are going to store it, you are going to have to move it from California, or wherever they generate nuclear waste, all the way to Illinois, and you could probably do it by rail.

It could create horrendous problems if a lot of communities decided, like New York has decided, that they are not taking hazardous wastes through their community. What are you going to do?

Mr. SANTMAN. We have recognized those kinds of local concerns, and that is one reason why we are moving in deliberate steps in getting into the business of prescribing routing, and developing some sort of a Federal regime, scheme, pattern, guidelines, whatever comes out of our rulemaking dealing with the movement of radioactive materials.

Mr. RUSSO. This is a personal observation. Would you feel that more sites would be better than just one?

Mr. SANTMAN. I don't feel really prepared to deal with the technicalities of that, but obviously from a transportation perspective, if you have got the end delivery point more conveniently located to the places that are going to have the material to be disposed of you've got a better situation.

Yes, from the transportation perspective, we would prefer not to have the material generated on one coast and carried to the other coast for disposal.

Mr. FLORIO. If the proposed, or the preferred, way of transporting nuclear waste is by rail, and if, in fact, most nuclear wastes or spent rods are transported by rail, why is it obvious that you put greater emphasis on proposed rulemaking for trucks, and on rulemaking for transportation by rail of nuclear wastes.

Mr. SANTMAN. Primarily that is because that is where the issue has really burst forward in terms of confrontations between local officials who say: "Don't bring it through my community." and shippers who are attempting to move it. It has occurred in the highway mode with regard to the New York City ordinance precipitating a degree of confrontation between Brookhaven Laboratory on Long Island that was moving a couple of truckloads a year——

Mr. FLORIO. Does the New York City ordinance preclude transportation by rail as well. My understanding is that the ordinance is a generalized prohibition.

Mr. SANTMAN. I believe it is couched in those terms. I believe it says "by rail, by barge, by aircraft." I think the Federal preemption questions in the other modes of transportation are a bit different than they are in the highway mode.

I believe the highway mode, again traditionally, has had the greater local-State flavor involved with it than the other modes. I believe the question of whether or not the Federal Rail Safety Act, the Federal Aviation Act, and the maritime acts do in fact preempt State and local regulation in some of these areas has not yet arisen. It is kind of a different ball game than the highway area.

Mr. FLORIO. I am not sure that I understand the difference. The fact of the matter is that if you are going to transport the majority of the nuclear wastes by rail, and there are ordinances which now prohibit the transportation of those wastes through these municipalities, it seems to me that the more serious question is in dealing with the problem and ascertaining the need for a Federal regulatory system to appropriately regulate the movements.

If the train that derailed over the weekend had carried nuclear wastes, we might have had a totally different situation. I know that you are going to respond that the casks and the containers are up to the standards because they were up to the standards prescribed by the NRC. However, the NRC have also said that the plant at Harrisburg was up to standards.

So it seems to me that the regulation by rail is something that you should start to work on as rapidly as possible. Are there any intentions to go forward with a regulatory scheme for the transportation by rail of nuclear wastes?

Mr. SANTMAN. There is nothing underway at the present time that goes to mandating particular routes.

Mr. FLORIO. Is there anything underway with regard to a regulation system for the transportation of nuclear wastes by railroads?

Mr. SANTMAN. There is in our information system that Dr. Palmer has spoken of briefly earlier an examination of the entire national rail system. Part of the safety examination involves looking for certain ways of getting from point A to point B which may be preferable to other ways of getting from point A to point B by rail, and from out of that we may see something that suggests that a routing scheme may be in order.

Mr. FLORIO. It does not sound like we have too much confidence.

Mr. SANTMAN. I know it doesn't. I must return to the rail mode and maritime. I believe there is a higher degree of Federal preemption already in existence.

Mr. FLORIO. You have already acceded to the fact that the preemption obviously does not work because New York City now has an ordinance which obviously has been found to be valid thus precluding the transportation by rail or by truck through the city.

Mr. SANTMAN. It does to the highway question. That is the only question.

Mr. FLORIO. You just indicated to me that it was a blanket prohibition.

Mr. SANTMAN. I suggested that the way the ordinance was written can be construed that way. It can be read that way.

The way the question came to us was strictly in a highway mode. We have elected to address it in a digestible size. We really had to wrestle with the question of should we expand it to cover radioactive materials by all modes of transportation, should we expand it to cover all hazardous materials by highway.

Mr. FLORIO. What you are saying is that because someone complained that they wanted to move something by truck, you responded to that complaint. No one to this point has complained that they wanted to move nuclear wastes by rail, and you have not responded to that. Is that effectively what you were telling me?

Mr. SANTMAN. This rulemaking is an outgrowth of a request we had from the persons who were trying to ship by highway as to whether or not that New York City ordinance was preempted by our Federal regulations.

Our agency concluded, in looking at the ordinance, that it was not preempted by the Federal regulations.

Mr. FLORIO. It seems to me that you should be setting the priorities. The vast majority of nuclear wastes are transported by rail, and it is economically more feasible to transport by rail, it seems. If you are going to establish priorities, perhaps you should do both rulemakings at the same time. But the priority might have been to establish a rulemaking process on the shipping national regulatory system, to oversee and regulate the transportation of these materials by rail.

Incidentally, I have seen something in the paper saying that the materials are being shipped out of Harrisburg, and I was wondering if you had any information as to who is doing it. Do you have any involvement in that? If so, what is taking place?

Mr. PALMER. I don't have an involvement, but I do have some information. At Harrisburg, the unit No. 1 was shut down for regular refueling and maintenance. The contract was with Chem Nuclear to transport wastes from unit No. 1. That was already scheduled to take place, but had not taken place.

They have accelerated that particular movement of nuclear wastes.

Mr. FLORIO. It was scheduled before the accident?

Mr. PALMER. Yes, and it was to happen sometime in the future. They do not specify the particular time, but that was an anticipated, regular movement of low-level wastes. So what has happened is that the contract with Chem Nuclear has been accelerated. They are carrying the waste out of unit No. 1 in anticipation of moving waste materials from No. 2, the one that has the reactor problem, or however it is characterized.

They intend, then, to place the waste from unit No. 2 into the holding areas for unit No. 1. Chem Nuclear has received overweight permits for the material they will be moving from unit No. 1.

Mr. FLORIO. What do you mean, overweight permits?

Mr. PALMER. They are transporting this material slightly overweight in the trucks. They have requested and received permits from the States to transport this. They have also received 24-hour

operating authority from all States that are involved. They are estimating 10 to 15 truck shipments annually.

As of April 6, at noon, two shipments had departed the plant in route to Barnwell, S.C. Three more were scheduled to leave the afternoon of April 6, and the trucks are operating with two drivers and 2-day turnaround schedules.

They estimate that the shipping will be completed by Thursday of this week, April 12, which will then permit the removal of the materials from unit No. 2, with the core problem, over into the tanks which formerly held what was in unit No. 1.

Mr. FLORIO. That is being moved by truck?

Mr. PALMER. Yes.

Mr. RUSSO. What happened in the case of the jurisdiction?

Mr. PALMER. There were several things that could have happened. In fact none occurred in this particular instance. If it is an imminent danger, the Secretary of Transportation has the authority to seek to suspend or restrict the transportation. I would assume that he would have looked at this together with those of us on his staff, and made a judgment as to whether there was an alternate route that was available. That of course is the subject of our rulemaking.

Mr. RUSSO. The thing that concerns me is your statement that you say there are problems with the railroads.

Mr. SANTMAN. First of all, the terms of the Federal Rail Safety Act, the act under which track standards are established, and which we have been talking about today, there are some very distinctive words addressed to the Federal-State relationship. When the act was enacted in 1970, many State rules were in place at the time, and they are to remain valid until such time as the subject is addressed by Federal rules.

Then, the Federal rules will absolutely preempt them with one exception—I am paraphrasing somewhat from memory—situations in which a special local condition gave rise to the localities or the States doing something different.

I would refer to Mr. James' closer familiarity with the Federal Railroad Safety Act.

Mr. RUSSO. If you don't have any rules in existence, it does not preempt anything. What the chairman was saying, you don't have anything for real. So how can you preempt if you don't have anything. I am not trying to give you a hard time. I am trying to figure where it is at.

Mr. SANTMAN. I think we are talking about the hypothetical State rule, or the local rule that says: "You are going to move your trains by this track route rather than that track route." I don't know how that would sit.

Mr. RUSSO. One last question, Mr. James. Were you ever consulted by DOE when they looked around for sites? Did you ever consult with them when they were looking at various sites?

Mr. JAMES. Not to my knowledge, but my knowledge is not definitive.

Mr. RUSSO. Would you let me know about that?

Mr. JAMES. I will look into that, yes.

Mr. SANTMAN. I believe in the development of the WIPP project for New Mexico, such routing considerations are ultimately worked

up by the Department of Energy. Who they have consulted, I don't know. But I am familiar enough with it to know that they are spending a lot of time in considering the transportation routes and the transportation equipment in and out of that proposed project.

Mr. FLORIO. Let me make one last observation and also ask one last question. On this whole question of what is going on in Harrisburg at this point, by way of transporting these materials out, my understanding is that they are not only talking about spent rods. You have said that spent rods were to be transported out of reactor No. 1, or are being transported in a more rapid way. The rods from reactor No. 2 are being put in the storage capacity for reactor No. 1. But there is supposed to be a lot more material wastes that became contaminated and will have to be disposed of in some way.

I would be interested—perhaps you do not have the information, but I would be interested, and the committee would be interested in learning if the storage capability in reactor No. 1 goes not only to spent rods, but also to some of the debris that is going to have to be transported.

I am very concerned about the absence of any kind of regulatory system dealing with truck transportation of these materials as well as the obvious absence and apparently no inclination to even move toward establishing a regulatory system for the movement by train, the preferred mode. I am also concerned to learn that waivers are being given for the trucking of these materials so that the trucks which are carrying these materials are free from any Federal regulatory system, and are carrying overweight loads. I think that this is something that is not conducive to providing too much confidence to the municipalities that these materials travel through. Are there any standards?

Mr. SANTMAN. It is not free from Federal regulations. There are stringent packaging regulations.

Mr. FLORIO. You have talked about it on a number of occasions, and we appreciate that fact. However, it is not the end of the need for some degree of monitoring of the transportation of hazardous materials.

Mr. SANTMAN. As to this particular movement from Harrisburg, each and everyone of the States have been notified.

Mr. FLORIO. OK. Was that a decision, or was that something that was required?

Mr. SANTMAN. In this case, it was required.

Mr. FLORIO. Under what authority?

Mr. SANTMAN. Because these States have weight limitations.

Mr. FLORIO. So if there were waivers required, then the States would not have had to have been notified. That is to say, if the trucks were at the appropriate weight.

Mr. SANTMAN. That is right. There is no Federal requirement that notification of a movement of a nuclear cask be given to any particular State official.

Mr. FLORIO. Does that seem appropriate to you?

Mr. SANTMAN. That, again, is one of the things that we have involved in the rulemaking. This is one of the questions that we are examining in this rulemaking, how they are routing. Some of the principles that we establish there, I expect to be somewhat

transferable to other modes, and to the movement of other products.

There are other products that raise some of these same kinds of concerns, too. I think the radioactive materials are at the cutting edge of the kinds of questions that we are dealing with today.

Mr. FLORIO. Obviously, we all agree with you.

Let me switch subjects for a moment.

Mr. James, about a year ago, we had testimony before this committee with regard to the authorization of a number of Federal inspectors who were authorized, a number of Federal inspectors who were actually hired, and a number of Federal inspectors who were actually out on the lines looking at the rails.

I can't remember the exact number, but it was something like 500 who were authorized, 300 who had been hired, and only 50 who were out in the field looking at rails. Can you correct my impression as to what the situation was at that time, and can you bring us up to date as to what the situation is today?

Mr. JAMES. I don't think we ever got as high as 500. I think there were about 250 at that time, and there were some vacancies. Then, of the number of people who were called safety inspectors, some are supervisors or specialists who don't go out all the time. They do other work.

I think we have in the track area alone, something like 50 inspectors out on foot and in the field all the time. Now, of course, we have motor power and equipment inspectors in an equal number, operating practice and other inspectors.

Mr. FLORIO. Has anything been changed since that time a year ago. Did you increase the capability? It is one thing to have a regulatory system and it is another thing to have the enforcement authority, while it is still another to have someone there to enforce the law.

Obviously, 50 people across the country is not a very formidable enforcement mechanism.

Mr. JAMES. Congress added at least 50 more positions.

Mr. FLORIO. What has the Department done in terms of filling those positions?

Mr. JAMES. We have not filled all of them. We have filled some of them.

Mr. FLORIO. I am not sure you are capable or prepared to give us numbers at this point, but we would like, as soon as possible, some clear statement as to what is authorized and the number of people who are hired, and what it is that they are doing.

Mr. JAMES. Certainly, we can provide that.

[The following information was received for the record:]

The Office of Safety staffing authorized by the Congressional Authorizations Committees was as follows:

	FY 1978	FY 1979
Safety Inspectors	500	600
Signal and Train Control Inspectors	45	45
Clerical	110	125
TOTAL	655	770

The Appropriations Act authorization and the on board employee strength each year are as follows:

	March Authorized	1978 on Board	March Authorized	1979 on Board
Regional/Safety Directors	8	8	8	8
Motive Power & Equipment Inspectors	93	92	110	103
Operating Practices Inspectors	48	46	48	46
Track Inspectors	80	62	109	64
Signal and Train Control Inspectors	29	27	32	32
Hazardous Material Inspectors	22	16	30	21
Trainees	6	2	6	0
SUBTOTAL	286	253	343	274
CLERICAL	45	45	56	52
REGIONAL STAFF TOTAL	331	298	399	326
Office of Safety Headquarter Personnel				
Professional	44	44	50	48
Clerical	25	16	25	19
SUBTOTAL, HEADQUARTERS	69	60	75	67
TOTAL OFFICE OF SAFETY	400	358	474	393
END OF YEAR EMPLOYMENT CEILING		383		443

Mr. FLORIO. Gentlemen, we certainly appreciate your willingness.

Mr. Madigan?

Mr. MADIGAN. Earlier, Mr. Chairman, during Mr. Russo's questioning, something had come up about the costs of the economic impact of regulation. You had indicated that you were going to go back to that, and I thought we should because I was not at all sure what was being said there.

As I understood, Dr. Palmer, you said that this was not the driving force. But you certainly took into account the economic impact of the regulations. If we could take a look at this railroad situation from Sunday, and project that, say, to some highly populated area in New Jersey.

Had it happened there instead of where it did happen, I would assume that the consequences for the public would have been much greater.

In your process of regulating of trying to regulate railroads in such a way as to see that that kind of thing is avoided, if it was determined that to upgrade a particular section of track, for example, was going to cost $10 million in order to effect a public savings, and if you also determined that the railroad involved was not capable of funding that $10 million, then may I assume that that lead you to conclude that you could not enforce or adopt that regulation?

Mr. PALMER. No. I would think that the evidence there is quite clear that we would, indeed, as we have already done, put a slowdown on that particular railroad. I don't think there is any hesitancy to enforce the regulation as it exists.

My reference was in the development of regulations. One of the criteria that we are obligated to review is the economic impact of development of the particular regulation on a particular industry, and that we do. That is not a driving force, but it is something that we review and submit to the appropriate people for their consideration.

Mr. MADIGAN. Is that a consideration at all? Does that contribute to the possibility of not having a regulation, for example, with regard to the movement of hazardous wastes?

Mr. PALMER. No.

Mr. MADIGAN. It does not?

I am not at all sure, then, that I understand what it means.

Mr. PALMER. A case in point would be, probably, the best way to explain it. One of the rulemaking procedures that we are involved in at the present time is to the siting of LNG plants in order to determine where these plants might safely be located.

We conducted site locations, did a study of hazard and risk, and also of the economic impact back to the gas company, or those who would operate the plant under those regulations as they would apply to that particular facility. That is just a routine part of what we do, and that is all I was attempting to convey.

Mr. SANTMAN. It sometimes deals with the cost of choices for particular safety problems, and the time for making them effective. For example, several years ago, when we consolidated the regulations, and we standardized the placarding, your placards on railcars and your placards on highway trucks, and your labels on packages meant the same thing to the merchants.

There were questions of when these things were going to be available, and at one point in time the farmers in the Midwest were very concerned about having to pull their nurse tanks out of service in order to put these placards on the sides of their nurse tanks.

In that situation, because of the economics of the situation, we extended the compliance period a month or two, to get them through the summer period.

Other times, we look at the cost, for example. We get into the tank car retrofit. We look at the costs versus the benefits.

Mr. MADIGAN. If we assume, and I think we all assume, that these things are better moved by rail than by truck, and if we start with that assumption, and then say that this regulation would add enough to the cost of the movement of this substance, whatever it is, that it probably would no longer be moved by rail, but would, instead, be moved by truck.

So it is better to keep it on the rail without regulation, or without additional regulation than to allow it to be switched to the truck, which is a less safe mode.

Mr. PALMER. I don't think that this would be a driving force in the applicability of a particular regulation. We have not confronted this situation, but it certainly would be a factor to examine, to determine whether one makes a choice in light of that information. That is what I would propose to do.

Mr. FLORIO. Gentlemen, we thank you very much.

Ladies and gentlemen, we have one further witness, however, we have a vote. The committee will stand in recess for approximately 10 minutes, and we will conclude when we return.

Thank you.

[Brief recess.]

Mr. FLORIO. The committee will resume its deliberations.

Mr. Jorling, we are very pleased to have you here. We appreciate your willingness to wait all this time. We would ask you, for the record, to introduce your colleague and proceed.

STATEMENT OF THOMAS C. JORLING, ASSISTANT ADMINISTRATOR FOR WATER AND WASTE MANAGEMENT, ENVIRONMENTAL PROTECTION AGENCY, ACCOMPANIED BY KENNETH BIGLANE, DIRECTOR, OIL AND SPECIAL MATERIALS CONTROL DIVISION

Mr. JORLING. Thank you, Mr. Chairman. With me is Ken Biglane, who is the Director of the Oil and Special Materials Control Division of the EPA.

I do not have a prepared statement. I am prepared to briefly describe some of the important aspects of EPA's authority in emergency response, the EPA program in emergency response, including the EPA-Coast Guard program, some of the problems we are experiencing, and describe some of the recommendations that we are committed to make to Congress with respect to some of the shortcomings we see in the area of emergency response.

I must say that I am sympathetic with the chairman's remarks earlier this morning concerning the appearance of the Federal Government, always studying and considering, and reviewing actions, rather than taking actions. I do want you to know that the

program of response, the EPA program and the Coast Guard program, we are very proud of.

There are areas where the Government responds in the field and does it very effectively. The level of coordination and joint participation by both the Coast Guard and EPA is very good. I will describe more of this a little later on.

With respect to authority, there are several statutes that authorized EPA to take one or another sort of emergency action. Several of these arise in this committee, one of which is in your subcommittee. Under section 7003, we have the authority to go to Federal Court and seek injunctive type relief for actions which are determined to be threatening, the imminent and substantial endangerment of public health and welfare.

Similarly under a different subcommittee of this committee, the safe drinking committee, we have authority to issue administrative orders as well as go to court, and also to make available dollar assistance, money assistance. However, that program has never been appropriated.

Under section 303 of the Clean Air Act, we have authority to issue orders or go to court, or both, in the area of emergency air pollution episodes.

Section 7 of the Toxic Substances Control Act gives the agency the authority to go to court, seeking relief of an injunctive nature. Section 6(a) of the Federal Insecticides Act provides for emergency suspension, registration of chemicals and pesticide chemicals.

Under the Public Works Committee, under the Clean Water Act, we have several authorities. Section 504 which enables us to go to court to seek remedy as well as to provide assistance in dollar form. Again, however, that program has never been appropriated.

Section 311 of the Clean Water Act, which I will spend most of my time on this morning, moves beyond the ability to go to court, and allows the agency to take direct action itself. I will describe this program in a moment.

There are also authorities which are delegated to EPA in conjunction with the Disaster Relief Act, which covers natural disasters upon declaration by the President. That is the nature of our authority.

I think it is safe to say that we are in a transition type period. The statutes which I have described anticipate that the problem is one of getting the court to direct a responsible party to take appropriate action to abate an emergency situation.

Visualize, if you will, where this authority has been used in the Clean Air Act in Birmingham, Ala. EPA approached the court and asked to turn plants off, in effect. That is the kind of remedy that was anticipated by most of our emergency authorities, if there is a party there that is doing something that it has control not to do, and has the capability not to do.

Mr. FLORIO. Mr. Jorling, all the things that you listed so far entail court action.

Mr. JORLING. That is right, except for the one under the Clean Water Act, which I will come back to.

Mr. FLORIO. For example, this accident over the weekend, are you saying that your agency does not have authority until you get some from the court?

Mr. JORLING. No. With respect to this particular episode in Florida, we do have authority to move administratively to act without court intervention.

Mr. FLORIO. On the basis of what?

Mr. JORLING. On the basis of 311 of the Clean Water Act. I will describe that in a moment. But most of the statutes are limited to us seeking a court injunctive type relief, which anticipates that there is a party out there that can take the necessary action, and has the capability to take it.

If that set of circumstances is not available, then those mechanisms are somewhat deficient. More and more we see in the types of situations that are arising, the need for Government to respond effectively, to take control of the situation, and to act to clean up, to medicate, to protect public health and the environment.

The mechanism which has evolved under the Clean Water Act is under section 311. It has its origin in a program of exclusively restricted, in the earlier days, to oil discharges. Under the 1970 Clean Water Act, the program was set in motion.

The authority was granted to the President. The first act of the President was to distribute that authority between EPA and the Coast Guard, and some other agencies. But the primary agencies are the Coast Guard and EPA.

The simple definition or distinction is between inland water and coastal waters, where the Coast Guard has jurisdiction. The act was amended in 1972 to include authority parallel to the oil program for hazardous substances. That program, however, was not implemented through regulations, for a number of reasons, until the present. We have the proposed rules ready to become the final rules, which will trigger the same authority with respect to hazardous spills.

I can provide more information about this than just the technical details, for the record. I would like to describe what the nature of this program is.

Basically, what we have established, we and the Coast Guard together are mechanisms which afford the Government immediate notice of spills of oil, and soon to be hazardous substances. Upon receipt of notification of that spill, mechanisms are then launched. If it is an EPA spill through the Regional Response Teams whereby an on-scene coordinator responds. In the case of Florida, for instance, EPA was notified of this accident, and we had an on-scene coordinator on scene within the same day.

Mr. FLORIO. Was there oil involved in this?

Mr. JORLING. No, there was no oil involved. We do not need to have oil involved now to trigger our response. We still cannot, however, charge back against the owner-operator until the authorizations are effective. But the authority to act is now available.

The on-scene coordinator then has the authority to make the threshold judgment, and that threshold judgment is whether or not the owner or operator, the person causing the spill is taking the appropriate actions necessary to protect public health and welfare.

If he makes the judgment that it is not, he then takes control over the situation, and issues and becomes the responsible party for taking the appropriate actions necessary to protect the public health and welfare. There is clear authority for that person to take

that control. In inland waters, that person is the EPA official. In coastal waters, it is a Coast Guard official.

So that we have authority without intervention of the court, to take control over a situation, to adequately protect the public health and welfare, and take the necessary litigation steps.

Mr. FLORIO. Since the existence of waterways seems to be crucial in terms of triggering the response, are we just talking about surface waters or are we talking about potential infiltration of ground water as well?

Mr. JORLING. The limitation I have described does influence our ability to respond. Section 311 is tied to either discharge or threatened discharge to navigable waters.

Surface water, if the pathway is elsewhere, through the air or through soil contamination, ground water contamination, section 311's authorities are not fully available. That is one of the areas that we are identifying as an impediment to appropriate response. We estimate something in the order of half the hazardous spills to raise questions of navigable waters, and perhaps as high as one half do not. Therefore, our ability to act under section 311 authority is constrained in that fashion.

Let me just describe very quickly the resources that EPA has available in this area. We have in our fiscal year 1980 a request for 131 people in the oil and hazardous response program. That is divided 29 at headquarters, 102 in our 10 regions. Eight of those headquarters people, however, are assigned to an environmental response team, which is based in Edison, N.J., which is a new unit which was put together after the 1977 amendment which recognizes the nature of the spills of hazardous chemicals are much different than oil. They require a whole different order of magnitude of expertise and background information.

Therefore, we wanted to put together a very topnotch unit which could respond wherever in the Nation those problems occurred, to provide that kind of expertise. That unit is now in operation. One of the officials is on scene at the Florida episode. So those are resources that we have available.

Let me describe very briefly, because I know that the hour is late, some of the problems that we are identifying in the emergency response area.

First of all, one very basic limiting factor is capacity to respond. Both EPA and the Coast Guard are limited in our resources to effectively respond to all of the incidents that are occurring.

To give you some of the specifics behind that. The oil program has been in operation the longest. It has the greatest track record. It has the greatest data base. The Coast Guard central information receiving system was notified of 10,620 spills in fiscal year 1979, spills of oil. Neither the Coast Guard nor we could respond to 10,000 spills. In fact, we responded to a much smaller subset of the significant oil spills. EPA responded to 664. I do not have the actual response figures for the Coast Guard.

We simply have a capacity problem. We simply have to make judgments about those spills which we respond to, and those which we are simply unable to.

In the area of hazardous spills, the response is not as great because up until the rules go into effect, the response is voluntary.

We do not have the criminal sanction that accompanies the oil program until those regulations go into effect, which we expect will be June 1.

We have, however, in fiscal 1978, received information of 771 hazardous spills. The Agency was only able to respond to 148 of those spills. Again, the capacity problem that is very acute.

We also have a capacity problem that I know you are aware of in this general area of interest, in the hazardous abandoned site areas. We simply have not had the resources, nor in many cases the commitment to go out to those situations and identify them, and take the responsive action.

Another capacity with a problem is our resources. There are some different dimensions than just simply people and dollars. The major features of section 311 that enables the Government to act quickly is that it provides a reservoir of dollars which are available to that on-scene coordinator to take action, to hire contractors, to hire whatever the particular resource he needs, to hire it immediately with a fund called the section 311 fund. That was appropriated at $35 million in 1970.

It was a fund that has been appropriated twice incrementally in the interim, but has now come close to the point of depletion. At the beginning of this fiscal year there was $12 million available, or close to $12 million available. As of the beginning of March, the fund was down to $5 million.

We expect, at the rate we are seeing expenditures and problems arise that it will be depleted on or about July 1. That means that the Government will be without that important resource, enabling it to act in these situations.

We have pending in the agency a request to the Office of Management and Budget, for an addendum to the President's fiscal 1980 budget, for impact directed at that limitation.

Mr. FLORIO. Do you have access to any of the funds generated out of the oil super fund if, in fact, that legislation is approved?

Mr. JORLING. Depending on the way the legislation is ultimately written, EPA would have access to that fund for those spills that are in inland waters. The Coast Guard would have access to that fund for spills outside those waters.

Mr. FLORIO. You are formulating a response to the need for such a trust fund for abandoned sites. Is it your intention that such a proposal would also provide you with access to funds generated out of that trust fund?

Mr. JORLING. That is correct. We have committed to your committee and others that the administration will recommend a comprehensive proposal that will include oil super fund, hazardous bill super fund, and the abandoned site super fund. So that the Government is in the position to take the necessary steps that the people demand and expect in this type of situation.

A further limiting factor in the area of response is travel limitations. These can be of two types. EPA does not have instant access to its own fleet of aircraft, so that we do depend either upon commercial or private aircraft to get our people onto the scene. Oftentimes that is a limitation which does suffer.

For instance, in the Florida case, we received notice at 9:55 a.m. on Sunday April 8. The accident had occurred at 9:15. Because of

the inability to get flights quickly, our on-scene coordinator did not arrive on scene until 5 p.m. So there is that type of problem. It continues to bother us.

One other aspect which is very significant in our perception as managers is that there are travel ceilings on our budget, and those travel ceilings have the effect of hindering our response to these situations.

Mr. FLORIO. Have there ever been any discussion with regard to military authorities or with regard to accessibilty?

Mr. JORLING. The military is in the national contingency plan network. We have access to call on their resources, if they have them available, and the particular commander desires to make them available. In fact, in many instances, we do have access to military transport equipment, and military expertise. It is not, however, routinely available. Many commanders are very slow to react, as they could be expected to be, to these types of requests where they don't have control over the situation. But it is a problem.

Another problem which is of great significance as we move from the oil program into the hazardous program is various limitations related to equipment and expertise. The types of equipment that are necessary are often very high technology and require very highly trained officials to properly administer them.

We are not talking only about sampling and analysis equipment but actual response equipment. That is a whole different area. Another type of equipment that must be used, and we have available to our people, is protective clothing, and protective gas respirators and what-have-you, which are often necessary, and are necessary, for instance, in that situation in Florida, making those available widely to protect the first people on the scene, and then the public surrounding it is often a short factor.

Another problem that we have already touched on, but which I would like to reemphasize is statutes, which I mentioned. All the emergency authority directed at a discrete type of problem, either a Clean Air Act-type violation, solid waste violation, a drinking water-type violation, surface water violation, they come at it in that form.

However, incidents do not occur in discrete situations. There are often multiple pathways of risk that are caused by any particular incident. So we are moving more toward an environmental response rather than clean water or solid waste response.

We are trying to do that, and there may be some need to repair some of the statutes in order to give the full range of authorities for all types of incidents that we are beginning to experience.

Mr. FLORIO. Would it be appropriate to say that anytime there is an accident, truck, train, or whatever, and there is a discharge of a hazardous material, for example, oil, the product then becomes a waste product because it is obviously not being utilized the way it is supposed to at the point of the discharge?

If that is the case, isn't there, then, some legitimate authority for providing EPA, with the authority to deal with hazardous wastes, when we are talking about an accident of this sort?

Mr. JORLING. Yes, that has been one of the difficult questions. In the hazardous waste program, under the Conservation Act we are

having to deal with, the Department of Transportation regulates all chemicals in bulk and their transport. That is something on the order of greater than 5 billion tons a year of bulk, raw materials or other products that are transported.

Their program has within it all those chemicals. We estimate under the hazardous waste program will come on the order of 10 to 12 metric tons of waste. When a spill occurs, however, that material generally does become a waste and, therefore, could come under some other limited provisions of that. It also could become subject to the provisions of the hazardous pulp program under section 311, if it is one of the previously designated chemicals.

Mr. FLORIO. If there is a surface water supply around.

Mr. JORLING. That is correct, or the threat of it.

Mr. FLORIO. So it is very dependent upon where it is that the accident occurs.

Mr. JORLING. That is correct, although we are taking an increasingly liberal interpretation of that.

Let me simply summarize to a couple of the wide ranging we have responded to in the last couple of days within EPA. Again, I should add that the Coast Guard has been involved with their assistance.

You are familiar with the Valley of the Drums. We initially responded to chemicals associated with barrels. In receding waters in early January, we took certain actions under section 311. Subsequently, the identification of several sites nearby, including the Valley of the Drums, were identified.

Later in March, there was another flood in that area. We identified oil as leaking from some of those drums, and we commenced a section 311-type of response. I have some photographs, which I will be happy to show you that show very graphically how the agency and the Coast Guard responded to that, to repair a very egregious situation. That was the pathway. There was oil leaking into a tributary of navigable water and into surface waters of the United States.

Another type of action, however, was a threatened spill of larger quantities of an organic phosphate pesticide from a vessel in Virginia. The Coast Guard had the lead authority, but we had to respond with them to issue the necessary ocean dumping emergency permit to allow some of the bilge waters to be disposed of.

Again, it is a different of pathway that did involve the ocean, but we did respond.

Over this last weekend, in a nearby area, resulting from an accident in Gettysburg in March, phosphorous had exploded while being transported on trucks. That material, the residue and the remaining materials were put onto flatbed trucks, and taken as far as Hagerstown, Md., where it was realized that those containers were not secure. There was a very significant threat to public health and welfare as a result of the continued custody of those materials.

They were not causing any release to navigable waters, but they threatened that, even though their present location at the time, they were in a parking lot in Hagerstown, Md. But we did trigger the section 311 authority, and that material was subsequently moved last Saturday night, between 1 o'clock a.m. and 5 o'clock

a.m., to Camp A. P. Hill in Virginia, in a convoy, which was put together by the on-scene coordinator, and taken care successfully and moved successfully to that site.

Again, another type of situation, but one in which section 311 was a useful and necessary authority. We had a situation in your State, or we have a situation in your State presently with the Teamsters strike, where the sewage sludge generated from the Valley plant and the Middlesex plant was accumulating at a very high rate, and was exceeding the storage capacity because the Teamsters were on strike, and the materials were not being taken to the ocean dumping site.

We contemplated using the section 311 authority to enable us to get Navy tugboats to take those barges to sea. Subsequently, however, the union honored an injunction with respect to those problems, and has cooperated and is now hauling the material.

I should add also that the Teamsters did drive the phosphorous trucks last Saturday night, notwithstanding the strike. We were very fortunate that they did so.

Mr. FLORIO. I would commend you for your imaginative expansion and inspiralistic approach toward your jurisdiction because I think you are doing the right thing. But wouldn't it be a much more appropriate response to come forward and ask for a clarification and expansion on the legislation so you would not have to hope that you discover a barrel of oil on a site, or to hope that there is a surface water system around.

Mr. JORLING. We are doing that in that proposal that I mentioned that we will be transmitting.

Mr. FLORIO. That is with regard to the Clean Water Act, section 311.

Mr. JORLING. It will be in respect to the environmental emergencies, whatever pathway have exposure, to enable the Government to respond appropriately to protect public health.

Mr. FLORIO. What will be the general area, what committees would be involved?

Mr. JORLING. There will be five committees involved. Three on this side, and two on the other side. The three committees are the Public Works Committee, the Merchant Marine and Fisheries, and your committee. I might, however, add that there is a good climate, I believe, for a cooperative approach to this among the committees that we have been working with, but it is necessary to recognize that the pathways of exposure are diverse in many instances, and all of them or some combination of them are available.

We need to respond without straining the legal structure that we are presently operating under.

Mr. FLORIO. I will just observe that I have been tremendously impressed with the action-oriented nature of your personnel in many areas. I did go to West Point, Ky., and saw your strike force in action. It was a Mr. Stonemaker, I believe, who was in charge. The strike force was very, very good in getting things done. It is a pleasant relief from so many governmental agencies which are still studying things, and not really taking the bull by the horns, so to speak.

This committee is very much inclined to facilitate anything that we can do to assist you in responding to this area. One of the areas

that we clearly have jurisdiction over is RCRA. It is my understanding that under RCRA, you are charged with the responsibility of coordinating with MTB in terms of coming forth with the emergency response mechanism.

Your reference as to the Coast Guard, was that fulfillment of your responsibilities under RCRA?

Mr. JORLING. In part. We have had several problems. Let me first come back.

Your description, I think, is an accurate one about the attitude of these individuals across the country, both in the Coast Guard and in EPA. I must point out that it is in large measure attributable to the person sitting to my left.

I have often referred to Ken Biglane as the Red Adair of the Federal Government. He has put together a very effective team of people, and they do work. The magnitude of the pressure that accompanies an on-scene coordinator, either EPA or Coast Guard, is awesome.

The person who was in charge of this phosphorous situation in Hagerstown is a civil servant who had to spend about 72 straight hours on the job. He moved the material over and he did without incident. He brought along both the Governor of Maryland's and the Governor of Virginia's people with him. It was a very awesome responsibility.

The on-scene coordinator in Florida, we received an update just a few minutes ago, and one of his comments is that the press is in a state of panic. They are in a state of panic because they go on scene, and they do not think that the Government is doing enough to protect the public health and welfare.

He has all kinds of pressures, technical pressures, dollar pressures. He has to figure out where he can find resources to abate this situation, and he has the pressure of public and media officially continually clamoring. They really have a tremendously difficult role to play, and they are doing it quite well. I think that they deserve credit.

It is not an easy time to be a civil servant while people look down unfavorably upon people who work for the Government, and yet there are people who are doing a good job. I think that as a manager, I have to describe this every so often.

Let me come back to your other point, which I lost.

Mr. FLORIO. What I was asking you was if there is a need, particularly under the waste definition, to be expanded to provide you with clear authority. It is my understanding that as of now you have imminent hazard authority under RCRA. That authority, it seems to me, could be expansively interpreted.

This committee would be inclined to accept your recommendations and consider them as we reauthorize RCRA to provide you with clear, unequivocal authority to deal with this type of problem, and the interpretation that I see as being a logical one is that any material that is spilled or incident to an explosion immediately becomes a waste. Therefore, to provide you with the authority we would also be inclined to relieve you of the responsibilities of going to court to ultimately get cleanup activities. In fact, perceiving that there is a need for immediate onsite coordination, my own experience being that your operation is a very good one, we are looking

for opportunities to provide you with expanded authority to appear on site, to take charge and, to take control of these matters.

Mr. JORLING. We are in agreement with you. We do need to clarify the range of circumstances in which we can act, that we can act in the 311-type spills, the classic oil spills, into water. So that we can act in those situations.

Second, we do need to make sure that we have behind these officials sufficient resources to enable them to actually carry the particular remedies that must be applied to cleanup, or mitigate, or remove the tank cars, whatever it may be in a classic spill, or to take containment action in these areas of sites that we know exist.

We need that reservoir of resources, the super fund and all that it has come to mean, that type of vehicle. So we think that it is necessary. We do need short-term resources even while the super fund is pending.

Mr. FLORIO. I am not in any way diminishing the significance of money. I am fully aware of the fact that you need that money. I am hopeful that this Congress will respond to that need.

I am also concerned, though, about the legal authority that you have, so that we can provide you with the authority. For example, we have heard from some of the witnesses that there are overweight truckloads of nuclear wastes being shipped across the country at this point.

If there should be an accident where there is a threat to a particular area, and there is no surface water around, I have some understanding that your jurisdiction over nuclear wastes, certainly in accordance with RCRA, is not clear. What would you be able to do by way of coming on the scene and having any authority to do anything?

Mr. JORLING. One of the features, and I am going to have to have this reviewed to make sure that it is accurate, one of the features of all the authorities of the EPA is that there is always a definitional section that removes that material which is regulated under the AEC Act from our jurisdiction. That is in the Clean Water Act, the Clean Air Act, RCRA, and Safe Drinking Water Act.

We have some authority over isotopes that are used in research, and what-have-you, but we have no authority under present law to respond to these high level, rad level situations.

Mr. FLORIO. So if there was a derailment of a train that had nuclear wastes on it, and it constituted an immediate, imminent hazard to the community, you are saying you would have no authority to go in and deal with this problem?

Mr. JORLING. The authorities we presently operate under would not enable us to take action in those situations. I might add also that we are developing expertise in the hazardous chemicals area. We have little in the area of high level rad waste, nor the equipment nor any of the other things that must be associated with managing that kind of material.

Mr. FLORIO. I understand.

Mr. JORLING. But with respect to most other substances, we have authority. We have limitations, but we do have authority.

Mr. FLORIO. Gentlemen, we thank you very much for your continued cooperation, and we look forward to receiving from you, at your earliest convenience, any legislative proposals or recommen-

dations dealing with any of the things we have talked about this morning.

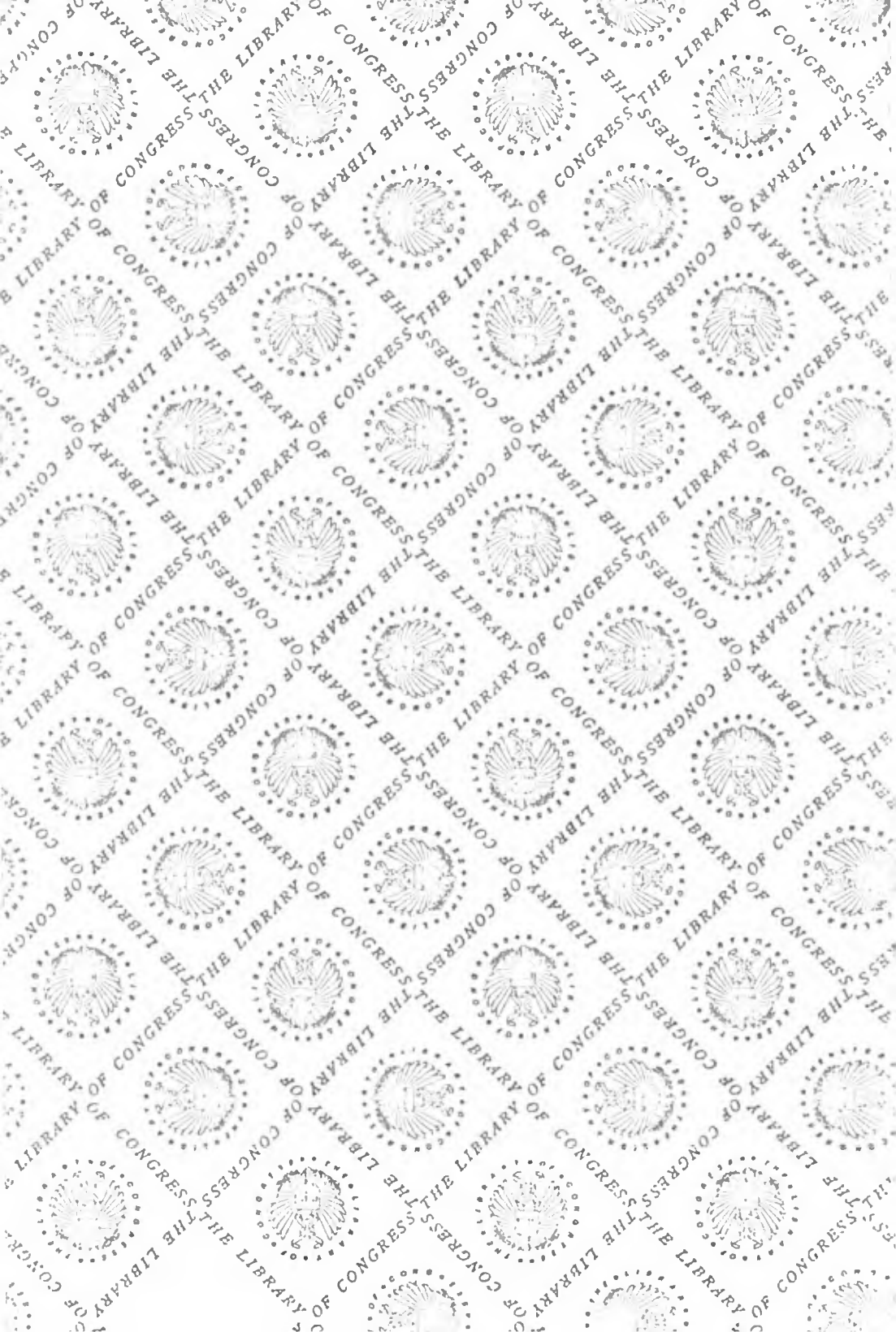
Mr. JORLING. We are on schedule with our mid-May date so far.

Mr. FLORIO. Thank you very much.

The committee stands adjourned.

[Whereupon, at 1:15 p.m., the subcommittee adjourned.]

○


THE LIBRARY OF CONGRESS